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THE EFFECT OF
RELIGIOUS EDUCATION ON MORAL DEVELOPMENT

by



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A THESIS

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "The Effect of Religious Education on Moral Development", submitted by Kenneth Harold Martin in partial fulfillment of the requirements for the degree of Master of Arts.

Abstract

The purpose of this study was to investigate the influence of religious training on moral development. An examination was made of the relationships among level of moral development, religious training in separate schools and in churches, and altruistic attitudes among adolescents.

The hypotheses of this study were concerned with the different effects of three types of religious training systems (Fundamentalist Protestant, Roman Catholic, and Protestant) on moral development as specified by the Kohlberg test of moral development. It was also expected that these effects would be affected by the intensity of the training, i.e., separate school/non-separate school experience. Other hypotheses predicted effects on an altruism task mediated by moral development level and also by type of religious training.

The subjects were tested in various separate schools and churches. They were administered a verbal intelligence test, the "Hoffman Socialization Technique Questionnaire", and the Kohlberg test of moral development as paper-and-pencil tests. In order to test them on altruistic attitudes, the subjects were administered two tasks which they were required to perform simultaneously. The tasks were so designed that it was not possible for the subjects to attend to both at the same time. Two experimental reward conditions were designed to manipulate task performance: an individual reward condition and a group reward condition.

The results of this study were partially as predicted showing a relationship between type of religious training, moral development and altruism. The results indicated that authoritarian types of religious

training produce students who score high on Kohlberg Type IV morality—a rule-oriented approach. Also this authoritarian type of training produces students who score very low on altruism. I would suggest that this is because such rule-oriented students are externally rather than internally motivated. On the other hand the results indicate that more liberally-oriented types of religious training tend to produce students who score higher on altruism and who are more humanitarian-oriented in moral development.

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TO BEVERLEY, KENDALL, AND SHARI

Introduction

The purpose of the present study is to investigate the influence of religious training on moral development. Specifically, this investigation is concerned with examining the relationships among level of moral development, religious training in separate schools and in churches, and altruistic attitudes among adolescents. For convenience within the context of this study "religious education" will be taken to refer to Christian religious education, and religious instruction will refer to Christian religious instruction which is based largely on the teachings of the Bible. Moral development will be defined in this paper in terms of Kohlberg's theory of moral development. This will be described in more detail later in this paper. Altruism is defined as the possession and expression of a desire and willingness to help other people when given the opportunity to do so.

Studies on Moral Development

During recent years several psychologists have focused their attention upon a systematic, empirical study of the development of morality (Kohlberg, 1963, 1964). As a result there has been an increase in theoretical statements about concepts such as conscience and moral values. Considering the fact that within the last several decades the peoples of the world have witnessed and experienced the attempted extermination of the Jewish race under the power of Nazi Germany, the dropping of two atomic bombs on Japan, and other atrocities, it might be said that a systematic study of moral development is long overdue. It is obvious that society today desperately needs solutions to moral problems.

The Freudian Approach to the Study of Moral Behaviour

For Freud morality developed as a result of the child identifying with his parents. That is, a conscience, or as Freud termed it, a superego, is instilled in the child's personality through identification and internalization. Through identification the child learns the standards of moral conduct in his society. Once these standards are learned they indicate to the child what are acceptable behaviours and what are unacceptable behaviours. These internalized standards thus operate to check anti-social impulses. Freud said that these standards or rules were internalized and if the person transgressed against an internalized rule the forces of the superego would come forward as guilt feelings. With such an internalized set of rules the person would act in agreement with the conventional standards of his society even without the immediate presence of social sanctions. Two aspects of Freudian theory have persisted and have appeared in later approaches to the study of moral behaviour: (1) the thought that character is acquired by the internalization of conventional moral standards, and (2) the idea that conscience is acquired by the child and thus he develops the capacity to experience guilt. The character trait approach and the superego strength approach to the study of moral behaviour are based respectively on these two aspects of Freudian theory.

Freudian-Based Approaches to the Study of Moral Behaviour

Character as acquired traits. The classic studies by Hartshorne and May (1928 - 1930) resulted in what has been termed the character trait approach to the study of moral behaviour. According to Hartshorne and May, moral character is a constellation of personality traits, e.g.,

honesty, altruism, responsibility, etc. They viewed a trait as a consistent pattern of responding which was characteristic of an individual. Hartshorne and May used a research methodology which is referred to as the "resistance to temptation" situation. In such a situation a child is given some type of task to perform and also some type of incentive so that he is motivated to get a good score. The experiment is arranged so that success in the task is either very difficult or impossible to achieve. In such situations the child is tempted to cheat in order to succeed at the task and the task is designed so that it appears to the child that he can cheat without being detected, but in fact, the experimenter can tell whether or not cheating takes place. Generally speaking Hartshorne and May did not find any consistent tendency to resist deviation by cheating. Their results showed a distribution of scores (combined across situations) which approximated a normal curve and not the bimodal curve which they had expected. The correlations between situations were low to moderate. If the test situations were similar the correlations ran above .60, but as they became more and more dissimilar the correlations approached zero. On the average the modal correlation between tests was between .30 and .40.

From their studies of the character trait of honesty Hartshorne and May concluded that the behaviour which society classifies as "honest" is more a function of situational factors than it is of a trait of one's personality. Another conclusion they reached as a result of their intensive study was that there was a lack of any real relationship between moral knowledge and moral behaviour as evidenced by resistance to cheating. This general finding, that a person's "conventional moral knowledge" fails to predict moral conduct, implies that the study of

moral judgments is far more complex than it was originally supposed by such researchers as Hartshorne and May. Further studies (Maller, 1934; Brogden, 1940; Barbue, 1951) have suggested that there is considerable generality of the moral trait for which Hartshorne and May found slight evidence. However, the question still remains as to how much of moral behaviour can be accounted for by assuming a general trait and how much of moral behaviour is actually controlled by situational factors. Burton (1963) did a factor analysis of the Hartshorne and May data. He found a first factor of moderate generality which accounted for 35 to 40% of the variance. Burton points out that many of the low correlations in the Hartshorne and May data are between pairs of tests in which at least one of the tests has a very low or unknown reliability. His conclusion is that there does appear to be some general factor operating in resistance to temptation behaviour; however, the magnitude of this general factor is not too great.

Character as superego strength. As mentioned above, Freud also stressed the importance of the acquisition of a conscience and the subsequent capacity of the person to feel guilt. This view is often termed the superego strength approach to the study of moral behaviour. The general idea of superego strength is that the magnitude of a person's feelings of guilt following the transgression of an internalized standard is in direct proportion to the strength of his conscience, and that the anticipation of this guilt will decrease the probability of a transgression occurring.

One of the early methods of studying this relationship was to put subjects in a situation where they could cheat and then ask them for a self report on how guilty they would feel about cheating. In a study by

MacKinnon (1938) 25% of those who cheated reported that they felt guilty about cheating and 75% reported indifference. On the other hand, 84% of those who did not cheat reported that they would have felt guilty and 16% reported that they would have felt troubled. The problem with this approach is that the experimenter does not know whether these self-reported responses of the subjects are accurate or whether they simply reflect what is socially desirable.

Another method which has commonly been used to measure the strength of the tendency towards guilt has been the transgression story completion technique. Subjects are presented with a hypothetical story situation in which the actor commits some type of transgression and are then asked to complete the story. The responses of the subjects are scored for the amount or the intensity of projected guilt. Pittel and Mendelsohn (1966) point out that researchers using such devices to assess superego strength operate under the assumption that the amount or intensity of projected guilt indicated by stories involving one content area indicates the projected guilt in other content areas. Little support for such an assumption has been found.

According to Percival (1970) the relationship between story completion guilt and resistance to temptation is still equivocal. Percival goes on to say that there is no support for the contention that there is some generalized tendency or capacity for experiencing either relatively "weak" or relatively "strong" guilt. Rather, the strength of the guilt seems to vary as a function of the content of the moral situation, individual judgments as to the seriousness of the transgression, and so on.

In general, most of the studies in this area have assumed that a

person has a unified superego, what Percival (1968) terms "a unitary integrate of internalized standards of conduct, moral values, and attitudes, etc." As mentioned above, no support for such an assumption has been discovered. Percival (1968) points out that the superego strength approach has committed the common fallacy of defining moral behaviour in terms of assumed conventional moral standards, and that this practice of assuming that people generally tend to make moral judgments in terms of commonly accepted rules denies individual differences in moral judgment.

The "Good Habit" Approach to the Study of Moral Behaviour

From a variety of learning theoretical points of view, moral development is interpreted as simply the acquisition by the person of a "set of good habits". For example, Eysenck (1960) proposes that guilt is a conditioned emotional response, that is, conditioned anxiety. Guilt is also considered as a learned response, learned in the context of the individual's social setting and specific to certain cues.

Other learning theory approaches have stressed the importance of the learning of socially acceptable rules through imitation of parental models (Bandura and Walters, 1963), or the learning of ways of conduct which bring forth reinforcement by social agents which leads to the avoidance of social sanctions (Aronfreed, 1968). According to Kohlberg (1964) this concept of character as the possession of a set of "good habits" by the individual has not really received much empirical support.

There are also many learning theories which stress the importance of punishment and rewards for the development of moral behaviour. There is a considerable amount of experimental evidence that shows that temporary and often long lasting results in the suppression of behaviours can be achieved through the use of punishment. Church (1963) presents a

review of these studies in regard to the effects of punishment on animals, and Aronfreed (1968) presents a review of studies on the effectiveness of punishment in producing behavioural suppression in children. In both reviews the point is stressed that there are several important conditions to be met in order for punishment to be effective. Timing of the punishment is one of the most important variables to be considered. It has been found that punishment is most effective when it occurs immediately with the transgression and becomes progressively less effective as the interval between the response and the punishment increases. Aronfreed (1968) also introduces another limitation to the general effectiveness of punishment in addition to timing. In order to suppress a deviant act the child has to be able to make the relevant discriminations prior to committing the act. The child must be able to anticipate which type of behaviour in which type of situation might lead to punishment. Aronfreed stresses the role of cognitive representation in making this process possible.

In spite of the limitations of the punishment method of behavioural control suppression can be achieved with at least temporary success if the parents administer punishment under facilitative conditions. The indiscriminate use of punishment, which is often the case, is ineffective at best and can produce harmful side effects. In general various studies (Hoffman and Saltzstein, 1967; Bandura and Walters, 1959; Glueck and Glueck, 1950) have shown that induction or reasoning is more productive of moral character than is the use of punishment and reward. That is, moral behaviour is related to the acquisition by the child of a set of ego abilities.

The Judgmental Approach to the Study of Moral Behaviour

The basis of this approach is that for one to say that some action is "moral" or "immoral", is a judgment on the part of the person making such a statement, and it presupposes some system by which such judgments are made (Percival, 1970). The point is also made that there are individual differences in the way in which people make moral judgments and that different people use different systems of moral reasoning. In contrast to other approaches the judgmental approach considers that these individual differences in moral judgment are of primary importance if the development of conscience is to be understood. For example McCord and Clemes (1964) state:

The common assumption that all "mature" people share the same moral and ethical standards has led psychologists (and others) to overlook the importance of individual differences in moral reasoning. But reasons ... far from being an irrelevant adjunct to personality, are an important key to understanding it ... (p. 18).

Character as ego strength. During recent years it has been suggested that moral behaviour is largely the result of the acquisition of ego strength by an individual. Kohlberg (1964) points out that this approach is consistent with the common notions of prudence and will. This type of thinking regarding moral psychology dates back to the British associationists and utilitarians and their belief that moral character results from practical judgment and reason. This approach takes into consideration individual differences in moral reasoning and thus moves away from the assumption that all mature people share the same moral standards.

Generally speaking recent studies have shown that individuals at the lower end of the ego strength continuum are characterized by a lack of empathy and social judgment (Hoffman and Saltzstein, 1967); they do not show the capacity to delay gratification (Mischel, 1963; Barndt and

Johnson, 1955); and they cannot direct stable attention to a task for long intervals of time (Grim, Kohlberg, and White, 1968). These various studies show, on the other hand, that greater ego strength is characterized by a lack of reactivity and the ability to delay a response so that the individual can use his own judgmental capacities (Percival, 1968). As Percival (1968) states, "the emphasis here is on cognitive development. Judgment implies evaluation and choice and therefore an increasing emphasis on moral values."

Piaget. Several researchers have stressed that the individual judgmental processes which underlie moral conduct must be taken into consideration as well as simply the learning of socially approved rules of conduct. Piaget has put forward a theory of moral development which stresses the importance of successive stages in a child's conception of rules. Piaget (1948) has suggested three stages of development in the conception of rules by a child: (1) rules are simply habituations and the child has little sense of the obligatory nature of rules; (2) in the heteronomous stage rules are viewed as obligatory and sacred. Respect for rules is based on unilateral respect for authority; and (3) in the autonomous stage rules are based on mutual respect and cooperation, and these rules at this stage are rational and have purpose.

Piaget then goes on to define two moralities based on the last two stages: heteronomy and autonomy. He terms the first of these "moral realism" and bases it in the heteronomous stage. In this type of morality any act which shows obedience to authority is good and rules are seen as fixed, external entities, that is, they have a real existence which is independent of the person observing them. A child operating according to this principle of moral realism makes his judgments in

terms of the amount of rule deviance involved rather than in terms of intentionality.

The second of Piaget's "moralities" is based in the autonomous stage and is called the "morality of justice". The major characteristic of this type of morality is that there is a development of mutual respect and cooperation in social relations, and according to Piaget this development of mutual respect and cooperation is characterized by intellectual growth and experiences of role taking in the individual's peer group. The "rule of justice", according to Piaget, comes from a child's realization of reciprocity in social relations and the development of mutual respect. Such ideas as equality and distributive justice increase in importance as the child develops through the autonomous stage.

There has been considerable research done since Piaget first formulated his theory of moral development which has basically substantiated his general notion of developmental stages which are characterized by distinct types of thinking about moral issues (see reviews by Kohlberg, 1963, 1964). However, according to Nadeau (1967) there has been much less agreement about the nature of the process involved, the ages at which certain stages were reached, and the variables which have an important influence on development. As will be mentioned later in this section there is also disagreement regarding the stages themselves, e.g. the differences between the Kohlberg typology and that of Piaget.

The basic assumption that morality is a developmental phenomenon is generally based on studies which show invariant changes in conceptual level with increases in age (Piaget, 1932; Harrower, 1934; Morris, 1958; Kohlberg, 1958; Durkin, 1959a, 1959b; Johnson, 1962a, 1962b; Boehm and Nass, 1962; Whiteman and Kosier, 1964; Grinder, 1963). A positive rela-

tionship has also been found between moral judgment level and I.Q. (Kohlberg, 1958; Johnson, 1962b; Boehm, 1962a; Whiteman and Kosier, 1964). However it should be pointed out that some researchers have not been able to find such a relationship between moral judgment level and I.Q. (Boehm and Nass, 1962; Durkin, 1959a, 1959b).

Several recent studies have also looked at the influence of parents on the development of their children in the context of theories which stress developmental stages. Hoffman (1963) in his review of the research on the effect of child-rearing practices on moral development came to the general conclusion that the research supports the view that the frequent expression of warmth and affection towards a child helps the child to identify with the parent. The use of discipline techniques which try to change the behaviour of the child by inducing internal forces toward compliance, especially in the context of an affectionate parent-child relationship, apparently fosters the development of an internalized moral orientation at least with respect to one's reactions following the violation of a moral standard.

Kohlberg. Most researchers in the area of moral judgment processes have used some variation of Piaget's clinical method. Piaget's general procedure involved asking the subject to make responses to stories which represented moral dilemmas. The most involved scheme for coding the data obtained by such methods is that devised by Kohlberg (1958). Essentially Kohlberg obtained a large amount of material involving moral judgments from children of various ages, and then looked for the joint presence of various elements which appeared to have relationships to one another in the productions of the individuals. Kohlberg, as a result of this investigation, put forward a scheme which involves six types of

moral orientation. Each of these orientations, according to Kohlberg, seemed to focus on a distinct set of interrelated concepts of good and bad or right and wrong as expressed in typical patterns of thinking by his subjects about complex moral conflict situations. Kohlberg's subjects were consistently high or low on their moral orientation across different situations. Kohlberg further reduced these six types of orientation to three general developmental levels with subtypes within these levels (it was found that the only substantial positive correlations were between Types I and II; III and IV; and V and VI). It was also found that the arrangement of the six types in this manner gave a dimension which differentiated age groups at a highly significant level.

Kohlberg specifies three major levels with each of these levels being divided into two types. The passage of an individual from a lower to a higher level of moral judgment is a reflection of a greater degree of internalization and generalization of moral values. Also it should be noted that these stages also reflect an order of increased cognitive ability in the moral area. The following is a summary of the characteristics of moral judgment which are found at each level and for each type as reproduced from Kohlberg (1958):

"Level I - Value resides in external quasi-physical happenings, in bad acts, or in quasi-physical needs rather than in persons or standards.

Type I: Obedience and punishment orientation. Egocentric deference to superior power or prestige, or a trouble avoiding set. Objective responsibility.

Type II: Naively egoistic orientation. Right action is that instrumentally satisfying the self's needs and occasionally the other's. Awareness of relativism of value to each actor's needs and perspective. Naive egalitarianism and orientation to exchange and reciprocity.

Level II - Moral value resides in performing good or right roles, in maintaining the conventional order and the expectancies of others.

Type III: Good boy orientation. Orientation to approval and to pleasing and helping others. Conformity to stereotypical images of majority or natural role behaviour, and judgment by intentions.

Type IV: Authority and social order maintaining orientation. Orientation to "doing duty" and to showing respect for authority and maintaining the given social order for its own sake. Regard for earned expectations of others.

Level III - Moral value resides in conformity by the self to shared or shareable standards, rights or duties.

Type V: Contractual legalistic orientation. Recognition of an arbitrary element or starting point in rules or expectations for the sake of agreement. Duty defined in terms of contract, general avoidance of violation of the will or rights of others and majority will and welfare.

Type VI: Conscience or principle orientation. Orientation not only to actually ordained social rules but to principles of choice involving appeal to logical universality and consistency. Orientation to conscience as a directing agent and to mutual respect and trust."

The Kohlberg typology is considerably more detailed than Piaget's; however, in many ways the two systems are similar. An example would be a comparison of Piaget's heteronomous stage and Kohlberg's Type I. In both there is a tendency to make judgments according to physical consequences and to orient towards adult authority as a criterion for moral conduct. Kohlberg (1963) makes the point that Piaget sees the young child's morality as being externally oriented in a cognitive sense, not in a motivational sense. That is, the heteronomous orientation is based on a strong emotional respect for the authority of adults. The heteronomous child views punishment as an expression of adult disapproval, whereas the Type I child in Kohlberg's typology, views the punishment

itself as an external source of motivation. Percival (1968) points out that for Kohlberg moral development marks a trend from external sources of motivation to internal with each stage representing an increasing degree of internalization.

Piaget's emphasis is on different stages of cognitive development which provide different bases (heteronomous or autonomous) for morality as respect for rules. Kohlberg has subjected the Piaget approach to an empirical test, and has modified and extended the stage model. He has also found some cross cultural and predictive validity.

As mentioned previously resistance to temptation has been the traditional method used to measure moral conduct. Kohlberg (1965) reports that only 11% of a sample of college subjects at the level of moral principle cheated in a resistance to temptation situation, however 58% of the subjects at a level of conventional morality cheated. Also Kohlberg (1965) reports that 75% of the morally principled subjects refused to give increasing levels of shock to an experimental victim when ordered to do so while only 13% of the remaining subjects refused to do so.

In summary, Kohlberg seems to have developed a promising theory of moral development and also a promising methodology, that is, his system is pragmatic. It is this schema of moral development which will be used to conceptualize and measure moral judgment in the present study.

Studies on the Influence of Religion

The Influence of Religion in General

Throughout history it has generally been admitted that various religious beliefs and practices have wielded a tremendous influence upon the lives of people. Researchers such as Allport (1963) and Clark (1955;

1963) have pointed out some of the influences which religion has had upon people. According to Anderson (1964) most families in our western culture have been affected in some way by the ideals of our society's Judaeo-Christian tradition. Reuss (1954) concludes that Americans generally affirm a faith in God and also give institutions of organized religion a high respect. Lenski (1961) did research into the influence of the religious affiliations and orientations of 750 American families on their economic and political behaviour and family life. Lenski's general conclusion was that religion is a vital influence in American society, that this influence appears to be increasing, and that the impact of religion is felt on both a personal and social level.

When more specific and differentiated effects are sought, a number of possible alternatives are available from which investigators may choose. Religion as a dependent variable is not unitary. There are a number of possibilities.

One such possibility is the intensity of faith or religious practice — religiosity. When such measures as church attendance, frequency of prayer, scores on an orthodoxy-of-belief scale, and so forth have been used as indicators of religiosity, high scores have correlated positively with prejudice (Allport, 1963; Gregory, 1957), authoritarianism (Gregory, 1957), conservative social attitudes (Allport, 1963), and lower divorce rates, less indulgence in premarital sexual behaviour, and greater happiness in marriage (Reuss, 1954). However, other researchers (Kirkpatrick, 1949; Cline and Richards, 1965) have not been able to find any significant relationship between religiosity and other aspects of behaviour.

Another dimension, as Nadeau (1967) points out, are the differences

among major denominational groups such as Protestants, Roman Catholics, and Jews. He cites research which shows that denominational differences have not been found in measures of overt aggression and fantasy-aggression in boys (Lesser, 1959), interpersonal perception in children (Fiedler and Hoffman, 1962), evaluation of behavioural items (London, Schulman and Bloch, 1964), child-rearing values (Kohn, 1959), discipline techniques (Kunz, 1963), and use of a "coalition with God" approach in child control, e.g. a parent tells the child that God will punish him if he misbehaves (Nunn, 1964). Denominational differences have been found in opinions toward child rearing (Whiteman, 1959), social attitudes (Allport, 1963), and explanation by children of physical causality (Ezer, 1962). Nadeau (1967) concludes therefore that the findings on denominational influences are inconclusive and sometimes contradictory, and this has led to a search for more meaningful ways to study religious influence.

Still a third approach to the study of the influence of religion is to investigate the differences between various types of religious orientations. Distinctions have been made between people who interiorize versus institutionalize their religious beliefs (Allport, 1954), intrinsic versus extrinsic religious types (Allport, 1963), liberal versus conservative attitudes (Dreger, 1952), and fundamentalistic versus humanitarian religious orientations (Broen, 1957). The general conclusion drawn from the results of such research is that the distinction between interiorized, intrinsic, and humanitarian religious types on one hand and institutionalized, extrinsic, and fundamentalistic religious types on the other hand is a useful distinction to make. Research results have shown that religious institutionalism and fundamentalism,

is correlated with dogmatism, ethnocentrism, authoritarianism, and conservatism in many areas (Stanley, 1964a, 1964b; Allport, 1963; Spilka, 1958). Thus it has been shown that these religious types constitute an important variable; one which will be used in the present study to differentiate among several groups.

The Influence of Religion on Moral Development

Among the central and most obvious class of dependent variables in the study of the influence of religion is that of morals. According to Pike (1955) there is an inevitable relationship between religion and ethics. He proposes that if one looks beyond the action of an individual and begins to consider the topic of purpose, and the overall meaning of life, then theology becomes involved, and ethical implications flow from theology. The fundamental question of an individual's motivation for keeping moral law also involves theological issues eventually. Clark (1955) and Anderson (1964) consider religious beliefs as providing a basis for the making of sound value judgments and as furnishing a guide for behaviour.

Adams (1968) discusses the thought that in most traditional religious circles little distinction is made between morality and religion. In traditional Christian theology ethics is thought of in terms of the will of God for men. It is thought of as the practical side of religion, that is, ethics are the implications of religion for human relationships and conduct. Adams goes on to say that, on the other hand, in liberal religious circles, where many traditional religious beliefs and practices have been discarded and replaced, religious concern becomes identified with moral concern, religious values with moral values, and religious education with moral education. This approach reduces

religion to ethics. According to Adams (1968) an error is made when morality is reduced to religion or when religion is reduced to morality. In this regard it should be noted that religious education involves more than the teaching of moral precepts. Religious education also includes instruction in the history and geography of the Middle East, church history and practice, various theological concepts such as the meaning of sin, salvation, immortality, etc., however the teaching of moral precepts, in my opinion, is a vital part of any religious education program. However-that-may-be, it is clear that there is a very close connection between religion and morality.

Daines (1965) compiled what he termed, "A Review of Research in Religious Education". He divides this British research into seven groups as follows: (1) studies of the ethical consciousness and the effect of religious instruction upon character training, (2) studies of attitudes to religion and religious instruction, (3) studies concerned with religious consciousness and religious experience, (4) studies on teaching religious knowledge, method, and agreed syllabuses, (5) studies of historical interest, (6) theological studies, and (7) studies with a special reference to Roman Catholic education. It is the first of these groups which is of concern here.

Daines begins by mentioning the research of MacDonald (1924) who was concerned with the nature of ethical consciousness and the effect upon it of conflicting irreconcilable desires. As a result of this study MacDonald advocated the need for direct ethical teaching with much concern for the dominating role of the intellect in the pursuit of the personal ideal. Daines also mentions the work of Blatt (1952) who came to the conclusion that direct moral instruction is useless and he went

on to maintain that morality cannot be planted in a child, but rather it can only grow in its own time and way, aided by carefully controlled cultivation. He says that the need is for a practical morality working at every level. Christianity, according to Blatt, raises morality from the level of Humanism to the higher level deeply permeated by the teaching of the Bible. It should be noted that Blatt's conclusions were not empirically based.

One method through which religion can have an impact on morality is through the church and its educational agencies such as the parochial school and the Sunday school. According to Ben-Horin (1961) ethical concepts and conduct must be taught in the same way as any other subject matter in Jewish schools, that is, somehow those involved in Jewish education must lead children to achieve freedom from ethical unawareness and insensitivity and to achieve freedom for ethical intelligence and love. Heim (1950) takes the view that Christian education at present places its emphasis on the life of persons in private and social relationships and that this encompasses ethical conduct, that is, the focus is upon persons in life's relationships achieving a Christian way of living. According to Heim, Christian education deals with such fundamentals as moral responsibility, sin, and the greatest good, and concerns itself with such aspects of personality as knowledge and judgment, feeling and appreciation, character and conduct.

In Hurlock's opinion (1956) both the educational program of the church and the family are important. It is from the church, Sunday school, and religious instruction in the home that the child learns that certain things are wrong because they are specifically acts against the laws of God. Smart's (1954) opinion is that the religion of the parent

is more important than any other influence in determining what will be the child's religious orientation, which will in turn determine his ethics. At this point it should be noted that several researchers have found that participation in church activities is correlated with the degree of religious practices in the home (Anders, 1955; Rossi and Rossi, 1957; Brown and Lowe, 1951).

Although the weight of opinion of religious educators is clear — religious education is an essential influence on the development of moral character — the empirical evidence is somewhat more equivocal.

Hilliard (1959) reports the results of various studies on the influence of religious education upon the development of the moral ideas of children. The young child associates ideas of right and wrong, good and bad, with the idea of God and regards God as someone who rewards good behaviour and punishes wrong behaviour. Various studies, according to Hilliard's review, have suggested that by the beginning of adolescence the majority of children have rejected some of their earlier ideas about God's punishment of wrongdoing, however, the majority also continue to believe that God upholds the moral law or ideal. Much of current religious instruction still reflects the same basic attitude — that God requires people to be good and that He punishes wrongdoing. This is an important point to keep in mind when considering the effect of religious education on moral development. Children are taught to believe that God judges their behaviour as good or bad, and they are therefore punished or rewarded accordingly either by their parents in the presence of God or by God in the life to come. Hilliard found that 39 percent of his adolescent subjects stated that they had refrained from amoral activities because of religious convictions. Further research

evidence (Kuhlen and Arnold, 1944; Bradshaw, 1950) has suggested that during adolescence the idea that God rewards the good and punishes the bad are increasingly questioned and often abandoned. However, as Hilliard points out, it is important to notice that this fact does not necessarily imply that they also abandon the basic conviction that the moral law or ideal is somehow associated with the idea of God. There are indications which show that many adolescents and adults consider that belief in God and religious faith can and should help people to live morally good lives.

Hilliard concludes, therefore, that many adolescents and adults retain from their early days a conviction that religion can and should help them in the development and maintenance of moral ideas and conduct. Does this conviction come from the age-old idea of God rewarding good behaviour and punishing bad, or from a respect for the moral strength of the religious teachings of Christ, or from various religious principles contained in the New Testament, such as "he who loves God must love his brother also"? The answer to this question could perhaps be ascertained from how such individuals fall on a scale of moral development such as Kohlberg's.

Hartshorne and May (1928) found some evidence that children who attend Sunday school or church more often cheat less and are more honest in other ways than children whose attendance is limited. In a study which compared third graders in a church operated day school with third graders from the church's Sunday school, Cragon (1961) found that the parochial school children had superior knowledge about religious matters, however he failed to find differences in response to ten open-ended situations involving an ethical principle or concept. Boehm (1962b)

found when she compared 110 Roman Catholic parochial school students of semirural and urban background with 112 public school students in Brooklyn that Catholic parochial school children scored higher at an earlier age than public school children with regard to recognizing the distinction between motivation and results of an action. Socio-economic status or I.Q. made no difference. She also states that the parochial school children showed less dependence on adult authority and more peer reciprocity as sanctions for their behaviour, which she assumes to reflect a higher level of moral judgment. Whiteman and Kosier (1964) found no differences in moral judgment between children who attended Sunday school and children who did not.

Nadeau (1967) investigated the effects of the religious attitudes of parents on the development of moral judgment in their children. He hypothesized that children of parents with fundamentalistic religious attitudes would display levels and types of moral judgment which would differ from those of children of parents with humanitarian religious attitudes. The Kohlberg moral dilemma situations were used to measure moral judgment. The sample was composed of sixth graders attending three Lutheran parochial schools and sixth graders attending the Sunday school of a large Lutheran parish. His hypotheses were not supported by the data. Children of parents with fundamentalistic religious attitudes did not differ significantly from children of parents with humanitarian religious attitudes on either the level of moral judgment or on the type of thinking about moral issues they displayed. It was concluded that parental religious attitudes did not influence the moral development of children. There was no apparent relationship between parental religious attitudes and several child-rearing variables. This writer would

suggest that at least part of the reason for the absence of results in this study is due to the age of the children used in the sample. It has been concluded by several researchers (Kohlberg, 1958; Owen, 1968; Turiel, 1969; Krammer, 1968) that major shifts in moral development come at a later age. For this reason the present study will sample adolescents in grades 7 - 11.

The above-mentioned studies do show, however, that the findings on the influence of religious education through church agencies, parochial schools, and the home on moral judgment are equivocal and thus the need for further research is indicated.

Studies on Altruism

Another dependent variable used both in the study of the influence of religion and the influence of moral development level, is altruism. One of the major difficulties researchers studying altruistic behaviour have encountered is the problem of defining the term. The concept of altruism has been used in many different ways. Rosenhan et al. (1967) define altruism as a concern for others, and Lembo (1967) is similar in his definition of altruism as being a desire and willingness to aid others. Bryan et al. (1967) restrict the term somewhat when they say that altruism is a specific helping of another person without any expectation of a later compensation for oneself, and Midlarskey (1967) and Aronfreed (1964) have added the idea of sacrifice or some personal loss. Berkowitz et al. (1963, 1964, 1966, 1967) have looked at altruism in terms of the amount of effort one will exert to help a dependent other. As mentioned previously altruism in this study is defined as the possession and expression of a desire and willingness to help other people when given the opportunity to do so.

During recent years much concern has been evidenced regarding the determinants of altruistic behaviour. Three hypotheses have been put forward regarding the situational determinants of self-sacrificing behaviours. One hypothesis says that individuals behave in an altruistic fashion because of a compliance to a norm of reciprocity. Individuals are aware of the social debts and credits which have been established among them and they expect that eventually the mutual exchange of goods and services will balance (Gouldner, 1960). Another hypothesis is that of the social responsibility norm (Berkowitz, 1966; Berkowitz and Daniels, 1963; Berkowitz, Klanderman and Harris, 1964; Daniels and Berkowitz, 1963). These researchers say that dependency on others evokes helping responses even under conditions where the possibility of external rewards for the one helping are quite remote. A third hypothesis is that the presence of helping or non-helping models is a major determinant of altruistic behaviour (Rosenhan and White, 1967).

The influence of religion on altruism was investigated by Lembo (1967) who did a study to investigate group differences in altruistic attitudes among female college students differing in family, social, and religious experiences. As subjects he used Roman Catholic, Protestant, and Jewish female college students. He found no significant group differences in altruistic attitudes using a paper-and-pencil instrument to test for altruism. Lembo states that the findings of his study are quite consistent with the views of Hartshorne and May (1930), and Kohlberg (1964) that, generally speaking, attending character-building agencies such as Roman Catholic schools has no significant effect on the development of moral attitudes and conduct among children and adolescents. Lembo's findings reveal: (1) no significant differences between

Roman Catholic female college students who attended only Catholic high schools and Catholic female college students who attended only public high schools; (2) no significant differences between Roman Catholic lay and Catholic religious female college students; (3) no significant differences between Catholic female college freshmen and Catholic female college seniors, and (4) no significant differences between non-Catholic female college freshmen who attended only public high schools and Catholic female college freshmen who attended only Catholic high schools. Lembo (1967) concludes therefore that whatever differences exist within groups with respect to altruistic attitudes among Catholic female college students appear to require an explanation in terms of antecedents not related to consistent exposure to specific religious indoctrination, educational and occupation differences among fathers, students' differential school experiences, or experiences to any substantial degree after early adolescence. He says that it is probable that altruistic attitudes develop early in life as the child interacts with and reflects the cultural, social and personality expressions of his or her parents.

When the influence of moral development level on altruistic attitudes is considered, a study by Percival (1968), in which he investigated the motivational aspect of Kohlberg's theory of moral development, is pertinent. The three motivational aspects looked at were: interpersonal approval, the expectations of legitimate authority, and concern for maximizing majority welfare and distributive equality. These correspond to those dominant motives specified by the Kohlberg theory for Types III, IV, and V respectively. The last motivational manipulation is of concern in the context of the present study for the experimental

method used to test for altruistic behaviour was similar to that used in the present study. Percival hypothesized that each treatment should have its greatest effect in motivating task performance for its corresponding type and in general the results confirmed this hypothesis.

The Present Study

The main purpose of this study was to examine the relationships among religious training in separate schools and in churches, and level of moral development and altruistic attitudes among adolescents. As mentioned previously, moral development level is defined in this study in regard to Kohlberg's theory of moral development. To recapitulate briefly, Kohlberg's test has identified the following typology which is based upon 30 different general aspects of morality:

Pre-moral level

Type I: Punishment and obedience orientation,

Type II: Naive instrumental hedonism,

Morality of Conventional Role Conformity

Type III: Good boy morality, maintaining good relations
and approval of others,

Type IV: Authority maintaining morality,

Morality of Self-accepted Moral Principles

Type V: Morality of contract and democratically
asserted law, and

Type VI: Morality of individual principles of conscience.

A comparison of this theory with what has already been said in this paper about religious training practices should lead to the conclusion that a child who has been raised in an authoritarian-oriented religious structure, which emphasizes God rewarding good behaviour and punishing

bad, and the fact that there are unalterable rules of morality (e.g. the Decalogue), might well have his or her moral development stunted at the level of a conventional role conformity. However, a religious education system which stresses principles such as "Do unto others as you would have them do unto you", or, "He that loves God should love his brother also", more than the rules, might well lead to a higher level of moral development. It has been the writer's observation after several years of being closely involved in religious education systems that most religious training does succeed in instilling a knowledge of the "rules", but often falls short of the higher goal of instilling principles of moral living in young people. At least part of this study was to show whether or not different types of religious education systems differ in their relative success in this regard as measured by the Kohlberg scale.

It is also implicit, with some qualifications, in the Kohlberg theory that as a child moves from one level to the next there is an increasing tendency for him to have a desire and a willingness to help other people, that is, to be altruistic. A qualification on this statement could be made in the case of progression from Type III to Type IV where it could be said that there is a regression to less altruistic attitudes in the rule-oriented person. However, part of any religious person's rule system should have reference to the helping of one's fellow-man. The instilling of a desire to help other human beings is certainly one of the basic goals of religious training. The New Testament has a good deal to say about the development of a "Good Samaritan" type of attitude on the part of those who would claim to be religious. A successful religious education program should result in students developing an altruistic attitude.

Following from the implications of Kohlberg's theory with regard to type of religious training, and the development of altruism as indicative of level of moral development, and the success of a religious education program, the following relationships are expected:

- (1) The authoritarian types of religious systems (e.g. Roman Catholic and Fundamentalist Protestant) will result in students who have scores in the Conventional Role Conformity Range (Types III and IV) of the Kohlberg scale. This tendency will be more pronounced for the separate school groups because they have received more such religious training.
- (2) The religious training systems (e.g. Protestant) which do not stress the "rules" as much as they do general principles of conduct, will result in students scoring higher on the Kohlberg scale, that is, more of these students will score in the Type V and Type VI range than will be the case for the authoritarian-oriented sample. Once again, this tendency should be more pronounced for the separate school sample than it is for the non-separate school sample.
- (3) The higher the moral development level (Kohlberg) of the student, the higher should his score be on the altruism scale (Percival, 1968).
- (4) The authoritarian-oriented religious education program will tend to produce students with lower scores on the altruism task than will the more principle-oriented religious education system.

Method

Subjects

The subjects were adolescents in grades 7 - 11, approximate ages of 12 - 16, in the following parochial schools and church schools:

(1) Roman Catholic

(a) Roman Catholic students in grade 8 attending St. Patrick's Roman Catholic Separate School, Camrose, Alberta,

(b) Roman Catholic adolescents in grades 7 - 9 who do not attend a separate school, but who do attend church schools in Stony Plain, Alberta, and Leduc, Alberta,

(2) Protestant

(a) Lutheran students in grades 7 - 9 attending St. Matthew's Lutheran School, Stony Plain, Alberta,

(b) Lutheran students in grades 8 - 11 who do not attend a separate school but who do attend church school at Messiah Lutheran Church, Camrose, Alberta,

(3) Fundamentalist Protestant

(a) Students in grade 8 attending Prairie Bible Institute Grade School, Three Hills, Alberta, and

(b) Students in grades 7 - 11 who do not attend a separate school, but who do attend church schools at the Church of the Nazarene, Edmonton, Alberta, and Red Deer, Alberta.

An average of 35 students were tested in each group, that is, 35 separate school students and 35 non-separate school students in each denomination, matched evenly for sex in as much as this was possible, making a total of

212 students. Table 1 shows the number of subjects divided by religious training system, separate school/non-separate school, and sex. These students were chosen from among those who had had several years of religious education in the particular school or church education system being considered.

Table 1

Number of subjects divided by Religious Training System,
Separate School/Non-Separate School, and Sex

Group	Sex	Number
Fundamentalist Protestant		
Separate school	Male	19
	Female	20
Non-separate school	Male	12
	Female	18
Roman Catholic		
Separate school	Male	24
	Female	21
Non-separate school	Male	15
	Female	13
Protestant		
Separate school	Male	17
	Female	18
Non-separate school	Male	19
	Female	16

A pilot study was done using nine adolescents in the age group of 12 - 15 who attended the church school program of Edmonton Southside Church of the Nazarene, Edmonton, Alberta. The results of this study were used to check on the time required for the session and to test the

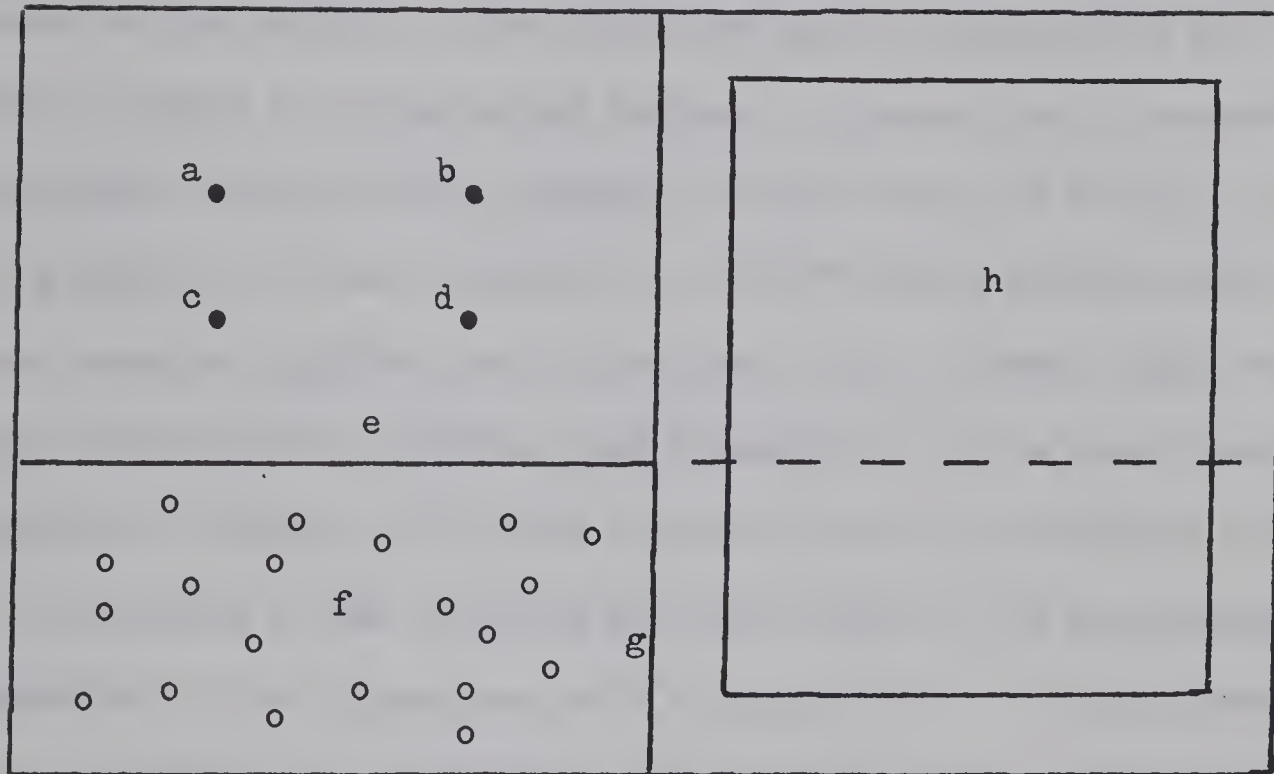
apparatus. As a result of this pilot study slight changes were made in both timing and apparatus.

Materials and Apparatus

The experimental task. The setting of the experiment varied slightly from group to group. In the case of the subjects who were tested in various churches the testing took place in an evening session with each group seated at tables in a room of the church. In the case of the separate school students the testing took place in classroom groups during regular class hours with the students seated at their desks. The experimental setting consisted of the subjects seated at either a table or a desk with an individual booth-like apparatus in front of them (see Figure 1). All groups were tested first on an altruism testing task. In this task they were required to work on two reward-motivated tasks simultaneously. The tasks were named the "letter cancellation game" and the "ring-and-peg game". The material for the "ring-and-peg game" was on the left side of the booth for right-handed subjects, or on the right side of the booth for left-handed subjects, and the "letter cancellation game" was on the other side. The "ring-and-peg game" consisted of two compartments on one side of the booth with four pegs in the rear compartment, two red pegs and two white pegs; and 120 rings in the front compartment, 60 red rings and 60 white rings.

On the right side of the booth (left side for left-handed subjects) there was a pad of paper containing; (1) an information sheet; (2) instructions for the "ring-and-peg game"; (3) instructions for the "letter cancellation game"; (4) a sheet consisting of a practice game for the letter cancellation task; (5) a score sheet for the practice games; (6) a sheet containing instructions for the combined "ring-and-peg game" and

Figure 1
Diagram of an Experimental Booth
(Top View)



To scale: $\frac{1}{4}$ inch equals 1 inch.

- Key:
- (a) White peg
 - (b) Red peg
 - (c) White peg
 - (d) Red peg
 - (e) Partition separating the front from the rear compartment
 - (f) Front compartment containing 60 red rings and 60 white rings
 - (g) Partition separating the left and right sides of the booth
 - (h) Pad containing information sheet, instruction sheets, letter cancellation rows, score sheets, and sheet of research questions

"letter cancellation game"; (7) a score sheet for the combined game; (8) a sheet of 60 rows of letter cancellation; and (9) a sheet of research questions (see Appendices A, B, C, D, E, and F in that order). The letter cancellation sheets consisted of rows of assorted capital letters, every sixth of which on the average was a capital letter "A".

The paper and pencil tests. A brief intelligence test was administered to the subjects. The test used was the "Quick Word Test" developed by Edgar F. Borgatta and Raymond J. Corsini and is essentially a vocabulary testing device designed, in the form used "Level 1 - Form Am", for grades 9 - 12 (see Appendix I). The "Hoffman Socialization Technique Questionnaire" (Hoffman and Saltzstein, 1967; Hoffman, 1969) was also administered to the subjects (see Appendix G). This questionnaire attempts to determine the most frequently used disciplinary techniques of the parents of the children who were tested. The questionnaire consisted of five situations with a list of 10 - 14 disciplinary techniques following each situation. The subjects were asked to look over the list, rate the absolute frequency of each, and rank the most frequently used techniques first, second, and third.

The most important of the paper and pencil tests was the Kohlberg test of moral development. The version of the Kohlberg test used in this study was composed of five hypothetical moral dilemma situations about which subjects were asked relevant questions (see Appendix H). For example, one of the situations is presented below:

In Europe a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost him to make. He paid \$200 for the radium and charged \$2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow

the money, but he could only get together \$1,000 which is half of what it cost. He told the druggist that his wife was dying and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So Heinz got desperate and broke into the man's store to steal the drug for his wife.

Should Heinz have done that? Was it actually wrong or right? Why?

Is it a husband's duty to steal the drug for his wife if he can get it no other way? Would a good husband do it?

Did the druggist have the right to charge that much when there was no law actually setting a limit to the price? Why?

Answer the next question only if you think he should steal the drug.

If the husband does not feel very close or affectionate to his wife, should he still steal the drug? Why?

Kohlberg originally administered the test in tape recorded interviews, but a paper and pencil form was utilized for this study.

Procedure

As already mentioned above each subject was seated at an individual booth in which there were various items. The experimenter stood in front of the group and asked them first to take the pencil provided and fill in the information sheet on their right (see Appendix A). When this sheet (and each of the following sheets in turn) was completed the subjects were asked to tear it off the pad and place it under the others. The subjects were then tested on the altruism testing task. The initial part of this test consisted of practice sessions doing each of the tasks individually. They were first asked to follow with the experimenter as he read the instructions for the "letter cancellation game" and then the instructions for the "ring-and-peg game" (see Appendix B). The subjects were then given a practice run of two minutes on the "letter cancellation game" using the sheet of rows of capital letters marked "Practice

Game". The subject's task was to cross out as quickly as possible the capital letters "A" in each of the rows. Following this the subjects were given a two-minute practice session on the "ring-and-peg game". In this task the subject's task was to place the white rings on the white pegs and the red rings on the red pegs with his non-dominant hand as rapidly as possible. They were then asked to record their own score for the "ring-and-peg" practice game (see Appendix C). The subject's score was calculated by adding up the number of white rings on the white pegs and the number of red rings on the red pegs, and then subtracting the number of errors (red rings on white pegs or white rings on red pegs) to give a final score. When this was completed the subjects were asked to replace all of the rings in the front compartment of the booth and to mix them up.

The subjects were then asked to follow with the experimenter as he read the "Combined Game Instructions" (see Appendix D). The two reward conditions were also read to the group (these were also printed on the sheet which the subjects had in front of them). The reward conditions were as follows:

- (1) If the class as a whole did better on the "ring-and-peg game", then the top one-quarter of the class would each receive \$2.00 and the rest of the class would receive nothing. For example, if there were 40 students in the class, and the class as a whole did better on the "ring-and-peg game", then the top 10 people received \$2.00 and the other 30 people received nothing.
- (2) If the class as a whole did better on the "letter cancellation game", then the prize money was divided equally

among the whole class. For example, if there were 40 people in the class and the class as a whole did better on the letter cancellation game then each member of the class received 50 cents (see Appendix D).

Before the combined game began, during which the subjects had two minutes to work on the two tasks simultaneously, the subjects were told, "Remember your performance will help to determine which game will become the prize game". This was done in order to enhance the effect of choice. They were then asked to re-read the instructions for themselves and to ask any questions they might have.

The experiment was timed so that there was not sufficient time for the subjects to complete either of the tasks. If a subject chose to devote more attention to the "ring-and-peg game" his choice was interpreted to be in a manner that was most likely to maximize his own welfare at the expense of others. If, on the other hand, a subject chose to devote more attention to the "letter cancellation game" then his choice was interpreted to be in a manner which would increase the group welfare. This aspect of choice was not specifically pointed out to the subjects but was left to each individual subject's perception of the situation. When the time was up the subjects were immediately told not to remove any of the rings from the pegs. They were then asked to fill in the set of research questions (see Appendix F). When this was completed they were told to come one at a time and bring their booth to the front of the classroom and place it on the floor. They were again reminded not to knock off any of the rings so that a true score could be obtained. The scores of the subjects on the "ring-and-peg game" were calculated by the experimenter before the booths left the classroom.

As mentioned in the introduction of this paper, a number of researchers have found a positive relationship between moral judgment level and intelligence scores (Kohlberg, 1958; Johnson, 1962; Boehm, 1962a; Whiteman and Kosier, 1964). In order to allow for inclusion of this factor, if found necessary, a brief intelligence test was administered to the subjects. The test used was the "Quick-Word Test" (see Appendix I). The "Quick-Word Test" is largely self-administering and easy to score, and thus met the need here for a rapid and valid test of intelligence.

Also, as previously mentioned, a positive relationship has been found between certain types of child-rearing practices and level of moral development (Hoffman, 1963). To allow for the inclusion of this factor, if necessary, the "Hoffman Socialization Questionnaire" (Hoffman and Saltzstein, 1967; Hoffman, 1969) was administered to the subjects (see Appendix G). The procedure for the Hoffman test has been outlined above. Following the completion of this test the subjects were given a five minute break.

The last test to be administered was the Kohlberg test of moral development (see Appendix H). The experimenter read the instructions for this test as the subjects followed with him on their copies. Approximately one hour was allowed for the subjects to write the Kohlberg test with a total time of two hours being required for the complete session. All of the subjects completed the various tasks in the allotted time period.

Results

The hypotheses of this study were concerned with the differential effects of three types of religious training systems on moral development level as measured by the Kohlberg Test. It was expected that these effects would be moderated by the intensity of the training, i.e., separate school/non-separate school experience. Other hypotheses predicted effects on an altruism task mediated by moral development level and also by type of religious training.

Kohlberg's scoring systems are of two types: (1) a sentence coding system which assigns to types each separate "thought content" which is produced by individuals on the moral judgment situations, and (2) a global rating system which assigns each total response to a given situation as belonging to one of the six types. Nadeau (1967) reports a correlation of .91 between the two scoring systems and he also estimated inter-judge reliability for two of the situations and found it to be .64 and .79. Turiel (1966) reports an inter-judge reliability of .94 on the global rating and a correlation of .78 between sentence coding and global rating scores when done by two different judges. The global rating system is less time consuming and therefore was used in the present study. In global rating each situation may be assigned a dominant type or level, or it may be assigned a dominant type plus a sub-type. There are three points allotted for each situation — if the situation is scored as manifesting one dominant type all three points are awarded to this type. If the situation is scored as manifesting a dominant type and a sub-type, two points are awarded the dominant type and one point the sub-type. The points are then totalled over all of the situations and scores are assigned as the percentage re-

sponding at each type level. The details of scoring by this method are described in the Global Rating Guide (Kohlberg multilith, b) (see Appendix J for an example).

The method of scoring for the altruism task has previously been described (p. 35). These raw scores were standardized and then changed into difference scores by subtracting the standardized score on the Ring-and-Peg task from the standardized score on the Letter Cancellation task. Thus positive scores are interpreted as altruistic and negative scores as non-altruistic.

The "Hoffman Socialization Technique Questionnaire" (see Appendix G) classifies the most frequently used disciplinary techniques of parents under four main headings: Power Assertion, Love Withdrawal, Induction, and Affection. In each of the first five situations the child is asked to read each item following the story and then to check how often his mother does each thing: "usually", "sometimes", "rarely", or "never". He then goes back and marks the one thing she does most often, second most often, and third most often. The scores are allotted as follows: the technique ranked first receives three points; the technique ranked second receives two points, and the technique ranked third receives one point. The scores for Power Assertion, Love Withdrawal, and Induction are obtained in this manner. On the last page of the test are a number of items which the child is asked to read carefully and then check how often his mother does each thing. These items give the "Affection" score. By marking an "affection" item "often" the person receives three points; "sometimes" — two points; "rarely" — one point, and "never" — zero points. The points on all measures are then summed over the five situations and the "affection" scores are also summed to give each

person a total score for each category — that is, Power Assertion, Love Withdrawal, Induction, and Affection (see Appendix K for an example).

Results for Major Predictions

The independent variables in this study were type of religious training with three levels: (1) Fundamentalist Protestant, (2) Roman Catholic, (3) Protestant; intensity of training (separate school/non-separate school), and sex. The dependent variables were the Kohlberg type scores and the standard-score-difference scores on the altruism task. A complete Table of Means can be seen in Appendix L.

Before presenting the detailed analyses of the data three problems that arose prior to the final analyses should be mentioned.

First, a major problem encountered after the data had been collected was the recognition of the fact that the group chosen to represent the Protestant separate school was not a good example. This school is operated by the Missouri Synod branch of the Lutheran church which is the ultra-conservative wing of Lutheranism. A church historian has stated the following regarding this branch of American Lutheranism:

In its faith the Missouri Synod has stood virtually alone among Lutheran bodies in America. Cultivating strict devotion to the Scriptures and the entire body of Lutheran confessions, the synod, ... has the strictest doctrinal basis of all Lutheran groups in America (Wentz, 1964).

The Protestant separate school which was used in this study has an "authoritarian" or "rule-oriented" approach which is very similar to that of the school chosen to be representative of Fundamentalist separate schools. The results of this study tend to show that these two schools are very similar. This similarity can be seen in the Table of Means (see Appendix L). Unfortunately this Lutheran school was the only available Protestant separate school which included the age-group under

consideration in this study. The non-representative nature of this group meant that in the analyses of this study the predictions regarding the effects of separate school versus non-separate school differences could not be as clearly interpreted as had been expected.

Secondly, the Table of Means (see Appendix L) also reflects a large difference between the verbal intelligence scores for the Protestant separate school group and the other groups, especially the Fundamentalist separate school group. I would like to suggest two reasons for this result. First, the Lutheran separate school children come largely from an ethnic background, i.e., the language spoken by many of their parents in their homes is German. Since the "Quick-Word" test is a test of English vocabulary their scores may have been negatively biased by their ethnic background. Secondly, the Fundamentalist separate school children are children of faculty members and students of Prairie Bible Institute, a college on the same campus as the school tested. Because of their home environment the vocabulary development of these children might be accelerated thus their scores may be positively biased on this test. The Table of Correlations (see Appendix M) shows a relationship between scores on the "Quick-Word" verbal intelligence test and moral development level (Kohlberg). The correlations ranged from $-.19$ and $-.27$ for Kohlberg Type I and Type II scores respectively, to $+.22$ for Kohlberg Type V and Type VI scores. These correlations were all significant ($p < .01$). However, the amount of variance contributed to the moral development level scores by the verbal intelligence factor is small ($.04$ for Kohlberg Type I; $.07$ for Kohlberg Type II; and $.05$ for Kohlberg Type V and Type VI).

Thirdly, a problem encountered when the results were being tabulated was the recognition of a wide spread in grade level. This resulted partially from the fact that in the non-separate school groups it was not possible to rigidly control this factor. The original spread was from grade six to grade twelve with the major concentration in grades seven, eight and nine. To reduce this spread six subjects were eliminated from the analysis, those in grade six and one subject in grade twelve. This made the mean ages of the various groups almost identical as can be seen in the Table of Means (see Appendix L).

Type of religious training and conventional morality level. The first prediction was that the authoritarian types of religious training systems (e.g. Roman Catholic and Fundamentalist) would result in students who had scores in the Conventional Role Conformity Range of the Kohlberg scale (Type III and Type IV), and that this tendency would be more pronounced for the separate school groups.

Table 2 shows the unweighted means, the weighted means collapsed over the sex factor, and cell frequencies for the Kohlberg Type III scores.

An analysis of variance on the Kohlberg Type III percentage scores across groups showed a significant main effect due to religious training ($p < .025$). The separate school/non-separate school effect was also significant ($p < .05$), however, this is difficult to interpret in a clear way because of the non-representative nature of the Protestant separate school group (see explanation, p. 40). The summary table for unweighted means analysis of variance for the Kohlberg Type III scores is shown in Table 3.

A comparison was carried out on the unweighted cell means with the Kohlberg Type III scores as the dependent variable and the religious

Table 2

Unweighted Means, Weighted Means Collapsed over Sex, and Cell Frequencies
Kohlberg Type III Scores

				Frequency	Unweighted Mean	Weighted Mean
Fundamentalist						
Separate school	Males	19		32.32	31.64	
	Females	20		30.95		
Non-separate school	Males	12		47.33	38.70	
	Females	18		30.06		
Roman Catholic						
Separate school	Males	24		47.21	42.60	
	Females	21		38.0		
Non-separate school	Males	15		41.8	40.67	
	Females	13		39.54		
Protestant						
Separate school	Males	14		21.79	27.37	
	Females	16		32.94		
Non-separate school	Males	18		42.89	40.17	
	Females	16		37.44		

training factor as the independent variable. The Fundamentalist groups were combined with the Roman Catholic groups and were compared with the Protestant groups. Table 4 shows the data for the comparison between the means of the Kohlberg Type III scores and the religious training factor. This comparison was significant ($t = 1.75$; $df = 194$; $p < .05$) with the Fundamentalist and Roman Catholic groups scoring higher on Kohl-

Table 4

Data for Comparison between Means of the
Kohlberg Type III Scores and Religious Training

Religious Training	Fundamentalist				Roman Catholic				Protestant			
	S.S.		N.S.S.		S.S.		N.S.S.		S.S.		N.S.S.	
Separate school/ Non-separate school												
Sex	M	F	M	F	M	F	M	F	M	F	M	F
.....
Means	32.32	30.95	47.33	30.06	47.21	38.00	41.80	39.54	21.79	32.94	42.89	37.44
Frequencies	19	20	12	18	24	21	15	13	14	16	18	16
Coefficients	1	1	1	1	1	1	1	1	-2	-2	-2	-2

Table 3

Summary Table for Unweighted Means Analysis of Variance

Kohlberg Type III Scores

Source of Variation	SS	df	MS	F
A (Religious Training)	2331.96	2	1165.98	3.86 **
B (Separate/Non-separate school)	1769.98	1	1769.98	5.85 **
C (Sex)	820.50	1	820.50	2.71
A X B	1823.01	2	911.51	3.01 *
A X C	1292.59	2	646.29	2.14
B X C	900.00	1	900.00	2.98
A X B X C	1483.52	2	741.76	2.45
Error	58651.27	194	302.33	

** $p < .025$ * $p < .05$

berg Type III. However, although this comparison follows from the hypothesis and is significant, it is clear that neither it nor the hypothesis clearly represents the pattern of weighted means in column 3 of Table 2.

In order to determine more clearly the pattern of significant differences between the means of the Kohlberg Type III scores for the various groups, a Newman-Keuls test for multiple comparisons between means was carried out on these data (Krammer, 1956). Table 26 (see Appendix T) shows the data for the Newman-Keuls comparisons between the weighted means (collapsed over sex since the sex factor is insignificant in the analysis of variance) of the Kohlberg Type III scores (dependent vari-

able) and religious training (independent variable). Significant differences ($p < .05$) were found between the means of the Roman Catholic separate school group and the Protestant separate school group; the Roman Catholic separate school group and the Fundamentalist separate school group, with the Roman Catholic separate school group scoring higher on Kohlberg Type III. Significant differences ($p < .05$) were also found between the means of the Roman Catholic non-separate school group and the Protestant separate school group with the Roman Catholic non-separate school group scoring higher on Kohlberg Type III; and between the means of the Protestant non-separate school group and the Protestant separate school group with the Protestant non-separate school group scoring higher on Kohlberg Type III.

The second part of the first prediction, i.e., that this effect would be more pronounced for the separate school students within each main group was also tested. Orthogonal comparisons were carried out with the Kohlberg Type III scores as the dependent variable and the intensity of religious training as the independent variable as shown in Table 6. The results of these comparisons are shown in Table 5 indicating that the first of these comparisons between the Fundamentalist separate school and the Fundamentalist non-separate school groups was significant ($p < .05$) with the non-separate school group scoring higher on the Kohlberg Type III level than the Fundamentalist separate school group. This effect is the opposite of that predicted. The comparison between the Protestant separate school and the Protestant non-separate school groups was also significant ($p < .005$) with the non-separate school group scoring higher on the Kohlberg Type III level than the separate school group.

Table 5

Results of Orthogonal Comparisons between Means of
Kohlberg Type III Scores and Separate school/Non-separate school Training

Comparison	t
(1) Fundamentalist separate school versus Fundamentalist non-separate school	1.66 *
(2) Roman Catholic separate school versus Roman Catholic non-separate school	0.45
(3) Protestant separate school versus Protestant non-separate school	2.95 **

** $p < .005$

* $p < .05$

To summarize the differences between the groups with respect to Kohlberg Type III scores, it is apparent that the Roman Catholic groups and the Protestant non-separate school group score higher, generally speaking, on Kohlberg Type III than does the Fundamentalist separate school group or the Protestant separate school group. As mentioned on page 40 the Protestant separate school group can also be considered as being Fundamentalist. Such an interpretation would be consistent with these findings. However, this latter group (the Protestant separate school group) scores lower on Kohlberg Type III than does the Protestant non-separate school group.

Table 7 shows the Unweighted means, the weighted means collapsed over the sex factor, and cell frequencies for the Kohlberg Type IV scores.

Table 6

Data for Orthogonal Comparisons between Means of
Kohlberg Type III Scores and Separate school/Non-separate school Training

Religious Training	Fundamentalist				Roman Catholic				Protestant			
	S.S.		N.S.S.		S.S.		N.S.S.		S.S.		N.S.S.	
Separate school/ Non-separate school												
Sex	M	F	M	F	M	F	M	F	M	F	M	F
.....
Means	32.32	30.95	47.33	30.06	47.21	38.0	41.8	39.54	21.79	32.94	42.89	37.44
Frequencies	19	20	12	18	24	21	15	13	14	16	18	16
Coefficients												
Comparison (1)	1	1	-1	-1	0	0	0	0	0	0	0	0
(2)	0	0	0	0	1	1	-1	-1	0	0	0	0
(3)	0	0	0	0	0	0	0	0	1	1	-1	-1

Table 7

Unweighted Means, Weighted Means Collapsed over Sex, and Cell Frequencies
Kohlberg Type IV Scores

		Frequency	Unweighted Mean	Weighted Mean
Fundamentalist				
Separate school	Males	19	50.16	52.11
	Females	20	54.05	
Non-separate school	Males	12	38.92	52.96
	Females	18	67.0	
Roman Catholic				
Separate school	Males	24	26.17	30.96
	Females	21	34.95	
Non-separate school	Males	15	32.80	31.83
	Females	13	30.85	
Protestant				
Separate school	Males	14	55.64	54.45
	Females	16	53.25	
Non-separate school	Males	18	37.78	36.83
	Females	16	35.88	

An analysis of variance on the Kohlberg Type IV percentage scores across groups showed a significant main effect for religious training ($p < .01$). The separate/non-separate school effect was also significant ($p < .01$), however, this is difficult to interpret clearly because of the non-representative nature of the Protestant separate school group (see explanation, p. 40). The summary table for unweighted means analysis of

variance for the Kohlberg Type IV scores is shown in Table 8.

Table 8

Summary Table for Unweighted Means Analysis of Variance

Kohlberg Type IV Scores

Source of Variation	SS	df	MS	F
A (Religious Training)	10840.51	2	5420.25	13.57 **
B (Separate/Non-separate school)	3388.97	1	3388.97	8.48 **
C (Sex)	348.07	1	348.07	0.87
A X B	2946.30	2	1473.15	3.68 *
A X C	658.57	2	329.28	0.82
B X C	30.02	1	30.02	0.08
A X B X C	575.93	2	287.97	0.72
Error	77498.12	194	399.47	

** $p < .01$

* $p < .05$

Again, in order to test the hypothesis, a comparison was carried out on the unweighted cell means with the Kohlberg Type IV scores as the dependent variable and the religious training factor as the independent variable. Table 9 shows the data for the comparison between the means of the Kohlberg Type IV scores and the religious training factor. The Fundamentalalist groups were combined with the Roman Catholic groups, and these were compared with the Protestant groups. As might be expected from looking at the pattern of weighted means in column 3 of Table 7, this comparison was not significant.

In order to determine more clearly the pattern of significant dif-

Table 9

Data for Comparison between Means of the
Kohlberg Type IV Scores and Religious Training

Religious Training	Fundamentalist				Roman Catholic				Protestant			
	S.S.		N.S.S.		S.S.		N.S.S.		S.S.		N.S.S.	
Separate school/ Non-separate school												
Sex	M	F	M	F	M	F	M	F	M	F	M	F
.....
Means	50.16	54.05	38.92	67.0	26.17	34.95	32.8	30.95	55.64	53.25	37.78	35.88
Frequencies	19	20	12	18	24	21	15	13	14	16	18	16
Coefficients	1	1	1	1	1	1	1	1	-2	-2	-2	-2

ferences between the means of the Kohlberg Type IV scores, grossly indicated by the analysis of variance, a Newman-Keuls test for multiple comparisons between means was carried out on these data (Krammer, 1956). Table 27 (see Appendix U) shows the data for the Newman-Keuls comparisons between the weighted means (collapsed over sex since the sex factor is insignificant in the analysis of variance) of the Kohlberg Type IV scores (dependent variable) and religious training (independent variable). Significant differences ($p < .05$) were found between the means of the Protestant separate school group and the Roman Catholic separate school group; the Protestant separate school group and the Roman Catholic non-separate school group, and the Protestant separate school group and the Protestant non-separate school group with the Protestant separate school group scoring higher on Kohlberg Type IV than the Roman Catholic and Protestant non-separate school groups. Significant differences ($p < .05$) were found as well between the means of the Fundamentalist non-separate school group and the Roman Catholic separate school group; the Fundamentalist non-separate school group and the Roman Catholic non-separate school group, and the Fundamentalist non-separate school group and the Protestant non-separate school group with the Fundamentalist non-separate school group scoring higher on Kohlberg Type IV than the Roman Catholic and Protestant non-separate school groups. Significant differences ($p < .05$) were also found between the means of the Fundamentalist separate school group and the Roman Catholic separate school group; the Fundamentalist separate school group and the Roman Catholic non-separate school group, and the Fundamentalist separate school group and the Protestant non-separate school group, with the Fundamentalist separate school group scoring higher on Kohlberg Type IV than the Roman Catholic and Protestant non-separate school groups.

Again, the second part of the first prediction, i.e., that this effect would be more pronounced for the separate school students within each main group was also tested. Orthogonal comparisons were carried out with the Kohlberg Type IV scores as the dependent variable and intensity of religious training as the independent variable. The data for these orthogonal comparisons are shown in Table 11. The results of these comparisons are shown in Table 10 showing that the first two comparisons were not significant, however a significant difference was found between the means of the Protestant separate school group and the Protestant non-separate school group ($p < .0005$) with the Protestant separate school group scoring higher on Kohlberg Type IV than the Protestant non-separate school group.

Table 10

Results of Orthogonal Comparisons between Means of
Kohlberg Type IV Scores and Separate school/non-separate school training

Comparison	t
(1) Fundamentalist separate school versus Fundamentalist non-separate school	0.17
(2) Roman Catholic separate school versus Roman Catholic non-separate school	0.26
(3) Protestant separate school versus Protestant non-separate school	3.53 *

* $p < .0005$

Table 11

Data for Orthogonal Comparisons between Means of
Kohlberg Type IV Scores and Separate school/Non-separate school Training

Religious Training		Fundamentalist			Roman Catholic						Protestant		
Separate school/ Non-separate school		S.S.	N.S.S.		M	S.S.	N.S.S.		S.S.	N.S.S.			
		M	F	M		F	M	F	M	F			
.....												
Means		50.16	54.05	38.92	67.0	26.17	34.95	32.8	30.95	55.64	53.25	37.78	35.88
Frequencies		19	20	12	18	24	21	15	13	14	16	18	16
Coefficients													
Comparison	(1)	1	1	-1	-1	0	0	0	0	0	0	0	0
	(2)	0	0	0	0	1	-1	-1	-1	0	0	0	0
	(3)	0	0	0	0	0	0	0	0	1	1	-1	-1

To summarize the results of the analysis of the Kohlberg Type IV scores it is apparent that the Fundamentalist groups and the Protestant separate school group score higher on Kohlberg Type IV than do the Roman Catholic groups and the Protestant non-separate school group. Again it can be seen that the Protestant separate school group fits in with the Fundamentalist groups, and that the combined results of these groups differ from the results of the Roman Catholic and Protestant non-separate school groups.

Type of religious training and post-conventional morality. The second major prediction of the present study was that the religious training systems (e.g. Protestant) which do not stress the "rules" as much as they do general principles of conduct, would result in students scoring higher on the Kohlberg scale, i.e., more of these students should score in the Kohlberg Type V and Type VI range than would be the case for the authoritarian-oriented sample. Once again it was predicted that this effect would be more pronounced for the separate school sample.

Table 12 shows the unweighted means and cell frequencies for the Kohlberg Type V and Type VI scores.

An analysis of variance of the Kohlberg Type V and Type VI scores (combined because of the scarcity of scores at this level) showed that the only main effect was due to sex ($p < .01$). In all groups except the Fundamentalist separate school group, females scored higher on the Kohlberg Type V and Type VI scale than did males. The summary table for unweighted means analysis of variance for the Kohlberg Type V and Type VI scores is shown in Table 13.

A Newman-Keuls test for multiple comparisons between means was carried out on these data (Krammer, 1956). Table 28 (see Appendix V)

Table 12
Unweighted Means and Cell Frequencies
Kohlberg Type V and Type VI Scores

			Frequency	Mean
Fundamentalist				
Separate school	Males		19	3.53
	Females		20	0.70
Non-separate school	Males		12	5.50
	Females		18	12.56
Roman Catholic				
Separate school	Males		24	7.42
	Females		21	14.38
Non-separate school	Males		15	3.07
	Females		13	11.77
Protestant				
Separate school	Males		14	1.93
	Females		16	5.38
Non-separate school	Males		18	4.78
	Females		16	11.56

shows the data for the Newman-Keuls comparisons between the means of the Kohlberg Type V and Type VI scores (dependent variable) and the religious training factor (independent variable). A significant difference was found ($p < .05$) between the mean of the Roman Catholic separate school female group and the Fundamentalist separate school female group with the Roman Catholic group scoring higher than the Fundamentalist group on Kohlberg Type V and Type VI.

Table 13

Summary Table for Unweighted Means Analysis of Variance
Kohlberg Type V and Type VI Scores

Source of Variation	SS	df	MS	F
A (Religious Training)	518.40	2	259.20	1.55
B (Separate/Non-separate school)	348.23	1	348.23	2.08
C (Sex)	1249.55	1	1249.55	7.46 *
A X B	979.08	2	489.54	2.92
A X C	270.37	2	135.18	0.81
B X C	308.04	1	308.04	1.84
A X B X C	153.77	2	76.89	0.46
Error	32486.14	194	167.45	

* $p < .01$

Moral development level and altruism. The third prediction was that the higher the moral development level of the subject, the higher should his score be on the altruism scale.

In order to test this prediction an analysis of variance was done using four levels of the Kohlberg scale as the independent variable and the altruism difference scores of dominant Kohlberg types as the dependent variable. In selecting the dominant types a 53 per cent criterion level was used for the Kohlberg Type I and Type II categories, i.e., in order to be classified as a dominant type a subject had to have over 53 per cent of his responses at this level. The Kohlberg Type I

and Type II subjects were combined because of the relative scarcity of subjects at this level. A 67 per cent criterion was used to select subjects as dominant Type III's and a 73 per cent criterion was used to select the dominant Type IV's. In selecting the Type V's and Type VI's a criterion of 53 per cent was used and again they were combined because of the scarcity of subjects at the post-conventional level. The distribution of subjects over type classifications and the mean altruism scores for each group is shown in Table 14.

Table 14

Mean Altruism Scores and Cell Frequencies

Kohlberg Dominant Types

Type Classification	Frequency	Mean Altruism Score
Type I, II	8	0.31
Type III	17	0.03
Type IV	23	-0.92
Type V, VI	7	0.99

A glance at Table 14 shows that the Kohlberg Type IV's score very low on the altruism scale, whereas the Kohlberg Type V's and Type VI's score relatively high. A summary table for the unweighted means analysis of variance for the altruism scores using dominant Kohlberg types as the independent variable is shown in Table 15. The main effect of Kohlberg types on altruism difference scores does not reach an acceptable significance level ($p < .10$).

Table 15

Summary Table for Unweighted Means Analysis of Variance for
Kohlberg Dominant Types and Altruism Scores

Source of Variation	SS	df	MS	F
A (Kohlberg Dominant Types)	20.32	3	6.77	2.13
Error	161.97	51	3.18	

A Newman-Keuls test for multiple comparisons between means was carried out on these data (Krammer, 1956). Table 29 (see Appendix W) shows the data for the Newman-Keuls comparisons between the means of the altruism scores (dependent variable) for the dominant Kohlberg types (independent variable). No significant effects were obtained.

The Table of Correlations (see Appendix M) shows a significant negative correlation between Kohlberg Type IV scores and altruism scores ($p < .01$), and a significant positive correlation between Kohlberg Type V and Type VI scores and altruism scores ($p < .05$). However it should be noted that in the case of the Kohlberg Type IV scores this correlation accounts for only 3 per cent of the variance and in the case of the Kohlberg Type V and Type VI scores the correlation accounts for only 2 per cent of the variance.

Type of religious training and altruism. The last prediction made was that the authoritarian-oriented types of religious education systems would tend to produce students with lower scores on the altruism task than would the more principle-oriented type of religious education pro-

gram.

Table 16 shows the unweighted means, the weighted means collapsed over the sex factor, and cell frequencies for the altruism scores.

Table 16

Unweighted Means, Weighted Means Collapsed over Sex, and Cell Frequencies
Altruism Scores

			Frequency	Unweighted Mean	Weighted Mean
Fundamentalist					
Separate school	Males	19	-1.17	-1.40	
	Females	20	-1.63		
Non-separate school	Males	12	-0.02	0.42	
	Females	18	0.86		
Roman Catholic					
Separate school	Males	24	-0.32	0.12	
	Females	21	0.55		
Non-separate school	Males	15	0.13	0.41	
	Females	13	0.69		
Protestant					
Separate school	Males	14	0.01	-0.25	
	Females	16	-0.51		
Non-separate school	Males	18	0.57	0.99	
	Females	16	1.41		

An analysis of variance was carried out on the altruism scores across groups and a significant main effect due to religious training was obtained ($p < .01$). The separate school/non-separate school effect

was also significant ($p < .01$). The summary table for unweighted means analysis of variance for the altruism scores is shown in Table 17.

Table 17

Summary Table for Unweighted Means Analysis of Variance
Altruism Scores

Source of Variation	SS	df	MS	F
A (Religious Training)	26.65	2	14.32	5.14 **
B (Separate/Non-separate school)	62.33	1	62.33	22.37 **
C (Sex)	6.61	1	6.61	2.37
A X B	19.66	2	9.83	3.53 *
A X C	3.07	2	1.54	0.55
B X C	8.00	1	8.00	2.87
A X B X C	7.58	2	3.79	1.36
Error	540.63	194	2.79	

** $p < .01$

* $p < .05$

A comparison was carried out on the unweighted means of these data with the religious training factor as the independent variable and the altruism scores as the dependent variable as shown in Table 18. The Fundamentalist groups and the Roman Catholic groups were compared with the Protestant groups. This comparison was significant ($t=1.90$, df 194, $p < .05$). However, once again, a look at the pattern of weighted means

Data for Comparison between Unweighted Means of Altruism Scores and Religious Training

62.

in column 3 of Table 16 shows that neither this comparison nor the hypothesis it tests are representative of the obtained results.

In order to more clearly determine the pattern of significant differences between the means of the altruism scores, a Newman-Keuls test for multiple comparisons between means was carried out on these data (Krammer, 1956). Table 30 (see Appendix X) shows the data for the Newman-Keuls comparisons between the weighted means (collapsed over sex since the sex factor is insignificant in the analysis of variance) of the altruism scores (dependent variable) and religious training (independent variable). Significant differences ($p < .05$) were found between the means of the Protestant non-separate school group and the Fundamentalist separate school group; the Protestant non-separate school group and the Protestant separate school group, with the Protestant non-separate school group scoring significantly higher on altruism than the Fundamentalist separate school and Protestant separate school groups. A significant difference ($p < .05$) was found between the means of the Fundamentalist non-separate school group and the Fundamentalist separate school group with the Fundamentalist non-separate school group scoring higher on altruism than the Fundamentalist separate school group. A significant difference ($p < .05$) was also found between the means of the Roman Catholic non-separate school group and the Fundamentalist separate school group, and between the Roman Catholic separate school group and the Fundamentalist separate school group with the Roman Catholic groups scoring higher on altruism than the Fundamentalist separate school group.

To summarize the results of the analysis of the altruism scores, it

is obvious that the Roman Catholic and Protestant non-separate school groups score higher on altruism than do the Fundamentalist groups. Once again, in at least one of these comparisons, the Protestant separate school group is cast in the same role as the Fundamentalist separate school group scoring significantly lower on altruism than the Protestant non-separate school group. These data would tend to indicate that the strict Fundamentalist separate school training is detrimental to the development of altruistic attitudes at least as measured by this study.

Incidental Findings

Various other data were available for analysis which were not specifically concerned with testing the hypotheses of this study. Scores were available for the Type I and Type II ranges of the Kohlberg test. Data were also obtained from the "Hoffman Socialization Technique Questionnaire" and from the "Quick-Word" verbal intelligence test.

The analysis of variance with religious training systems as the independent variable and Kohlberg Type I scores as the dependent variable showed no significant effects (see Table 20, Appendix N for analysis of variance summary table). The analysis of variance with religious training systems as the independent variable and Kohlberg Type II scores as the dependent variable did show a significant main effect due to religious training ($p < .01$) (see Table 21, Appendix O for analysis of variance summary table). The unweighted means, weighted means collapsed over sex, and cell frequencies for the Kohlberg Type II scores are presented in Table 19.

A Newman-Keuls test for multiple comparisons between means was also carried out on these data (Krammer, 1956). Table 31 (see Appendix Y) shows the data for the Newman-Keuls comparisons between the weighted

means (collapsed over sex since this factor was insignificant in the analysis of variance) of the Kohlberg Type II scores (dependent variable) and religious training (independent variable). Significant differences ($p < .05$) were found between the means of the Roman Catholic non-separate school group and the Fundamentalist non-separate school group; and between the Roman Catholic separate school group and the Fundamentalist non-separate school group, with the Roman Catholic groups scoring higher on Kohlberg Type II.

Table 19

Unweighted Means, Weighted Means Collapsed over Sex, and Cell Frequencies

Kohlberg Type II Scores

				Frequency	Unweighted Mean	Weighted Mean
Fundamentalist						
Separate school	Males	19		7.79	8.90	
	Females	20		10.00		
Non-separate school	Males	12		6.17	4.78	
	Females	18		3.39		
Roman Catholic						
Separate school	Males	24		14.50	12.51	
	Females	21		10.52		
Non-separate school	Males	15		18.13	15.99	
	Females	13		13.85		
Protestant						
Separate school	Males	14		15.14	10.76	
	Females	16		6.38		
Non-separate school	Males	18		11.89	11.39	
	Females	16		10.88		

The analysis of variance with the Hoffman test "Love Withdrawal" scores as the dependent variable and religious training system; intensity of religious training, and sex as the independent variables showed no significant effects (see Table 22, Appendix P for analysis of variance summary table). The analysis of variance with the Hoffman test "Power Assertion" scores as the dependent variable and religious training system; intensity of religious training, and sex as the independent variables showed no significant main effects, however there was a significant interaction between separate school/non-separate school and sex ($p < .05$) (see Table 23, Appendix Q for analysis of variance summary table). However, because of the non-representative nature of the Protestant separate school sample (see explanation, p. 40), the interpretation of this difference is not clear. The analysis of variance with the Hoffman test "Induction" scores as the dependent variable and religious training system; intensity of religious training, and sex as the independent variables showed a significant main effect due to sex ($p < .025$) with females reporting more induction on the part of parents than males (see Table 24, Appendix R for analysis of variance summary table). The analysis of variance with the Hoffman test "Affection" scores as the dependent variable and religious training; intensity of religious training and sex as the independent variables also showed a significant main effect due to sex ($p < .01$) with females reporting more affection on the part of parents than males (see Table 25, Appendix S for analysis of variance summary table).

The correlation analysis (see Appendix M for Correlation Matrix) shows a significant negative correlation ($-.15$) between the Hoffman test "Affection" scores and the Kohlberg Type II scores ($p < .05$). There is

also a significant positive correlation (.17) between the Hoffman test "Affection" scores and the Kohlberg Type IV scores ($p < .05$). However, in the case of the Kohlberg Type II scores this relationship accounts for only 3 per cent of the variance and also in the case of the Kohlberg Type IV scores it accounts for 3 per cent of the total variance.

A trend is evident in the correlation data (see Appendix M for Correlation Matrix) showing a slight relationship between scores on the "Quick-Word" verbal intelligence test and moral development level (Kohlberg). The correlations ranged from $-.19$ and $-.27$ for Kohlberg Type I and Type II scores respectively to $+.22$ for Kohlberg Type V and Type VI scores. The negative correlation of $-.19$ between the Kohlberg Type I scores and verbal intelligence scores was significant ($p < .01$) as was the negative correlation of $-.27$ between the Kohlberg Type II scores and verbal intelligence scores ($p < .01$). The positive correlation of $+.22$ between the Kohlberg Type V and Type VI scores and verbal intelligence scores was also significant ($p < .01$). However, the amount of variance accounted for by these correlations is small (.04 for Kohlberg Type I; .07 for Kohlberg Type II; and .05 for Kohlberg Type V and Type VI).

Discussion

The results of this study are at least partially as predicted. It was unfortunate that because of the non-representative nature of the Protestant separate school sample all of the results could not be clearly interpreted. The religious training system of the school designated as a Protestant separate school is very similar to that of the Fundamentalist separate school used in this study. To briefly re-iterate what has previously been stated; this school is operated by the Missouri Synod of the Lutheran church which is a very conservative branch of Lutheranism. In both theological position and practice the Lutheran school and the Fundamentalist school sampled in this study are much the same. Therefore, the assumption is made that when the results of the Protestant separate school sample are considered across the various measures of this study, what we are actually looking at are the results of a Fundamentalist separate school religious training system. In spite of the fact that the Protestant separate school used in this study does not represent a liberal type of Protestant religious training, I believe that it is reasonable to come to certain conclusions based on the findings of this study.

The results of the analysis of the Kohlberg Type III scores shows that there is a significant overall effect due to religious training. However, it is obvious from the data that the prediction that the Fundamentalist and Roman Catholic groups would score higher on Kohlberg Type III and Type IV than the Protestant group is in error in two ways: (1) the Roman Catholic students did not conform to the expectation that they would be authoritarian-oriented, and (2) combining Kohlberg Types III and IV was not an adequate method of dealing with the data. In this study

the Roman Catholic groups and the Protestant non-separate school group score higher on Kohlberg Type III than does the Fundamentalist separate school group or the Protestant separate school group. One of the Roman Catholic groups (Roman Catholic separate school female) also scored significantly higher on Kohlberg Type V and Type VI than did a Fundamentalist group (Fundamentalist separate school female). When these data are combined with the results of the Kohlberg Type IV analysis which shows the Roman Catholic groups scoring lower on Kohlberg Type IV than the Fundamentalist separate school group or the Protestant separate school group, some interesting speculations can be made. Could it be possible that the Roman Catholic separate school sampled in this study is not "authoritarian-oriented" as was pre-supposed and that a more liberally-oriented attitude on their part results in their students either largely skipping the Kohlberg Type IV stage or, at least, moving through it rapidly from Type III thinking to a post-conventional level of moral thinking?

It is when the Kohlberg Type IV results are considered that the differences in these religious education systems become pronounced. The various analyses show that the Fundamentalist students score significantly higher on Kohlberg Type IV than do the Roman Catholic students and also significantly higher than does the Protestant non-separate school group. These differences are also true for the Protestant separate school group, once again putting them in with the Fundamentalist group. It should be noted as well that the Fundamentalist groups score lower on Kohlberg Type II than the Roman Catholic or Protestant groups. It could be argued that the Type IV responses of the Fundamentalist students are perhaps superficial, i.e., they have the rules well learned

and are able to verbalize them, however they may actually be operating at a pre-conventional moral level. The low altruism scores of the Fundamentalist students would tend to support this view. Theoretically one would expect Kohlberg Type II subjects to score low on altruism. However, the data of this study show that the Kohlberg Type I and Type II subjects did not have an extremely low altruism score (see Table 14, p. 58). However, this is not a clear result because of the pooling of the Kohlberg Type I and Type II subjects, and because of the low number of subjects in this pre-conventional category. The Table of Means (see Appendix L) reflects an almost complete lack of responses at the post-conventional level by the Fundamentalist separate school students. A look at the raw data shows that the little response there is at the Kohlberg post-conventional level in the Fundamentalist separate school male group is almost entirely accounted for by one subject.

These data would suggest strongly that Fundamentalist separate school training tends to move students rather quickly through the first three stages of Kohlberg's moral development schema, however, it also stalemates their development at the Type IV, "authoritarian-oriented", level, and they rarely move beyond this level. The higher scores by the Fundamentalist non-separate school students, especially females, at the Kohlberg Type V and Type VI level (see Table of Means, Appendix L) would tend to indicate that this restricted development is largely specific to the separate school training. The obvious sex difference at the post-conventional morality level with females scoring higher than males rather consistently, is surprising. There is some suggestion that this is due to type of religious training, e.g., Roman Catholic separate school females score higher on Kohlberg Type V and Type VI than Funda-

mentalist separate school females, and also the Table of Means (see Appendix L) shows that the Roman Catholic females tend to score higher than the Protestant separate school females.

It is to be concluded, therefore, that the Fundamentalist separate school training system sampled in this study results in adolescents being brought only to a Kohlberg Type IV, "rule-oriented", level of moral development and kept there. Apparently this system does not take the students beyond the conventional morality level to a more mature and principle-oriented stage of moral development. The Roman Catholic and Protestant non-separate school religious training systems, on the other hand, did not result in this "stalemating" of moral development at this conventional level to the same extent.

What are the factors in the Fundamentalist separate school religious training system that tend to significantly produce this "stalemate" effect at the Kohlberg Type IV level? The data from the Hoffman child-rearing practices scale does not provide us with any significant information. The only significant correlation between the Kohlberg types and child-rearing practices are a negative ($-.15$) correlation between Kohlberg Type II and "Affection" scores and a positive ($+.17$) correlation between Kohlberg Type IV and "Affection" scores. However, as previously mentioned, these correlations account for very little of the variance. These results from the Hoffman test are surprising considering Hoffman's earlier results. Hoffman (1969) found power assertion most frequently associated with the externally oriented children, love withdrawal associated with morally conventional children, and induction associated with humanistic children. No such relationships were found in this study. However, when we look specifically at the type of training received by

these Fundamentalist separate school students a clearer picture emerges.

The particular school chosen as representative of Fundamentalist separate schools is extremely Fundamentalistic and rule-oriented. This school is affiliated with Prairie Bible Institute, an ultra-conservative Protestant Bible School located in the central, rural, "Bible-belt" section of Alberta. The children which were tested from the grade school on this campus were children either of the faculty members or students of the college, or children of farmers in the area who strongly support Prairie Bible Institute. Therefore it is safe to assume that the strict Fundamentalist teaching these students receive in this school is supported by their home environment. The training which these children receive is basically a legalistic type of religious training. These children are taught from the time that they enter this school, that the Christian Scriptures are the unalterable, inspired Word of God, and that these Scriptures are to be literally interpreted. Under no circumstances can the dictates of the Scriptures, as interpreted by their religious leaders and parents, be acted against without dire consequences to oneself (e.g. the fires of hell). Included, therefore, in the training of these children is the thought that the Decalogue (the ten commandments) must be kept at all costs! Included in the Decalogue are such statements as "Thou shalt not steal" and "Thou shalt honour thy father and thy mother". The dictates and prohibitions of the Scriptures are further added to by many other more "earthly" rules made by the Fundamentalist society such as prohibitions against attending movies or dances, against reading secular literature on Sundays, etc. The net result of all of these measures is that these children are clearly taught that rules must be kept under all circumstances. The Scriptures say that stealing is wrong,

therefore under no circumstances could it be proper to steal; the Scriptures say to honour your father and mother, and father and mother don't like stealing, therefore regardless of the circumstances the rules must be obeyed.

The result of the Fundamentalist type of training in regard to moral development is to be expected, but in this writer's opinion it is also to be regretted. Moral development, for Kohlberg, marks a trend from external sources of motivation to internal with each stage representing an increasing degree of internalization. Because of the multiplicity of external controls placed on these Fundamentalist students it is not surprising that they do not progress to a more mature moral level. The Fundamentalist education system tends to remind one of the system of the Pharisees at the time of Christ for they also had a multiplicity of external controls which often led them to a disregard for higher moral values such as the value of a human life. On one occasion they were prepared to stone a woman to death for committing adultery — a rule had been broken and death was the penalty. The Pharisees, as presented in the New Testament, were also likely at a Type IV level. Jesus Christ, had many harsh words for the "Type IV's" of his day and in place of their harshness and "rule-oriented" thinking he stressed general principles of living and a vital concern for the value of human life. The teachings of Christ, as transmitted in the New Testament, state that these principles such as "Do unto others as you would have them do unto you" and "Love one another as I have loved you", etc. superceded the Mosaic Law. In applying some of these principles to the moral dilemma situations involved in this study it could well be said that to "love one another" and "to do unto others as you would have them do unto you"

might involve breaking some rules. Jesus Christ was a post-conventional; it is to be regretted that many of those who strongly profess to follow the teachings of the New Testament fail to recognize this fact.

This study does tend to show that Roman Catholic and Protestant non-separate school training does not result in students who are "rule-oriented" in their outlook. It is evident from the data that the Roman Catholic and more liberal Protestant training results in subjects who score high on Kohlberg Type III. There is also an indication that the Roman Catholic and liberal Protestant students score higher on Post-conventional morality than do the Fundamentalist separate-school students. The Kohlberg Type III and Type V orientations are similar in that they are both humanitarian-oriented. The humanitarian responses of subjects at the Type III level are generally stereotypic responses of a "good-boy" orientation. At the post-conventional level these humanitarian responses are more rational. The results of this study show that the Roman Catholic and liberal Protestant training systems produce students who are humanitarian oriented rather than rule-oriented. In the course of collecting the data for this study the writer had opportunity to discuss some of these issues with a Roman Catholic priest. He expressed the concern that it was unfortunate that this type of study could not be done with his church's group several years from now since several years ago they had instituted a major change in their method of teaching, swinging more to "principle-oriented" instruction and away from the old method of rote-learning of rules and prohibitions. There are indications in the results of this study that the Roman Catholic church is already doing more in this regard than some others, notably the conservative protestant orientation.

Perhaps much of this changed emphasis at the local parish level in the Roman Catholic education system is due to the influence of the Vatican II ecumenical council which ended in 1965. For example the following statement was made by the Council regarding Christian education:

... with the help of advances in psychology and in the art and science of teaching, children and young people should be assisted in the harmonious development of their physical, moral, and intellectual endowments. ... they should be helped to acquire gradually a more mature sense of responsibility toward ennobling their own lives through constant effort, and toward pursuing authentic freedom. ... This holy Synod likewise affirms that children and young people have a right to be encouraged to weigh moral values with an upright conscience, and to embrace them by personal choice ... (Abbott, 1966).

The emphasis here is certainly more on individual moral responsibility mediated by internal development of "moral and intellectual endowments", than it is on the older authoritarian approach. Vatican II has had a tremendous influence on other aspects of church life such as worship; perhaps the same is true in the area of moral education.

The comments made above regarding the external control that seems to be operating in the case of the Fundamentalist students instead of internalized control, are substantiated by the data from the altruism task.

Before discussing these data a valid question to ask would be: was it actually altruism that was being measured in this study? It is this writer's opinion that the results of this part of the study are valid. The two different reward conditions were made very clear to the students and they were asked to re-read the instructions (see Appendix D) carefully before the testing session was run. It is my assumption that the students knew that their efforts would result in either a relatively high personal reward or a group reward. Comments made by a number of

the students (e.g. when do I get my money?) would tend to substantiate this assumption. Therefore I feel safe in stating that this task measured some sort of altruistic attitudes on the part of these students. However, it cannot be ruled out that other factors predominated to control their responses on the two tasks such as: differences in difficulty level of the two tasks, a desire on the part of the subjects simply to prefer one of the tasks over the other, problems with the equipment such as the compactness of the booth, etc. Responses to the questions on the "Research Questionnaire" (see Appendix F) tend to indicate that the subjects found that the two tasks were of approximately the same difficulty level, and that there were no major problems with the equipment. Therefore, the discussion will proceed on the assumption that what was measured was indeed some indication of altruistic or non-altruistic tendencies on the part of these students.

The analysis of the altruism scores showed that the Roman Catholic and Protestant non-separate school groups score higher on altruism than do the Fundamentalist groups and the Protestant separate school group. As mentioned previously, the Fundamentalist and Protestant separate school groups also score significantly higher on Kohlberg Type IV than do the Roman Catholic and Protestant non-separate school groups. The Correlation Matrix (see Appendix M) shows a significant negative correlation ($-.18$) between the altruism scores and Kohlberg Type IV scores, and a significant positive correlation ($+.14$) between the altruism scores and Kohlberg Type V and Type VI scores. In spite of the fact that the analysis of variance across Kohlberg dominant types (independent variable) and the altruism scores (dependent variable) failed to reach a significant level, a trend is evident showing that the Kohlberg Type IV's score

low on altruism and the Kohlberg Type V and Type VI's score high (see Table 14, p. 58). The results of this study would tend to indicate that the Fundamentalist religious atmosphere does not lend itself to the development of altruistic attitudes, rather, as the data show, the opposite effect takes place. These effects can be related to what has been said above regarding the external motivation which is evident in the Fundamentalist religious system. This type of atmosphere tends to produce Type IV (Kohlberg) students, but it is detrimental to the development of altruistic attitudes likely because of a lack of internal motivation being instilled in the students. On the other hand, the Type V and Type VI students, who are more internally motivated, score higher on the altruism task. The Roman Catholic education system and the more liberally-oriented Protestant training system tend to produce students who are more altruistic, i.e., more concerned with the welfare of other people. In my opinion this is because, in contrast to the Fundamentalist groups, they stress internalized principles rather than external rules. To return to the former analogy of the Pharisees of Christ's day, was it not this group of people who passed by "on the other side" when confronted with another's need on the robber-infested road from Jericho to Jerusalem in the parable of the "Good Samaritan"? Perhaps the parable was trying to indicate that legalism does not lead to a concern for others, i.e., to altruism. The results of this study would tend to support this view.

In summary, it may be said that religious education systems which are "authoritarian-oriented" result in instilling a strong desire in their students to obey the external rules of their society, however this

works to the detriment of more internalized moral attitudes and to the outward manifestation of these internal controls. On the other hand, more liberally-oriented systems (including, in this case, Roman Catholic) tend to produce students who are more internally motivated and this results in more mature moral development and more evidence of altruistic behaviour.

It is hoped that eventually this study can be replicated including a more liberal Protestant separate school group and Protestant non-separate school group, as well as representatives of other religious training systems such as Hebrew and Unitarian. A replication of this study should also use an older age group in order to increase the probability of obtaining more post-conventional subjects. It is expected that if older groups which are more representative of these religious orientations (especially liberal Protestant) were used in a replication of this study, the results would be more clear-cut than those obtained in the present study. However, this study definitely shows a trend in moral development which is a result of type of religious training.

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APPENDIX

Appendix A
Information Sheet

Name _____ Age _____ Sex _____

School which you are now attending _____

Number of years you have attended this school _____

Your present school grade _____

Your religious affiliation _____
(if Protestant please state the name of your church)

Sunday school, or other church school program, which you are now
attending _____

Number of years you have attended this church school program _____

Group No. _____ Subject No. _____

.....

Appendix B

Instructions

Letter Cancellation Game Instructions

In this game you are to draw a line through each capital letter "A" in each row of letters. Please notice that row #2 is to the right of row #1 and that row #3 is under row #1. Please go through the rows in the proper order. Work as quickly as you can on this game with your right hand (left hand if you are left-handed). You will only have a few minutes in which to work at it. Your score will be the number of correct rows you have done.

Ring-and-Peg Game Instructions

On your left you will see a ring-and-peg game. The rings in the front compartment are of two colours: red and white, and the pegs in the back compartment are of the same two colours. You are to place the white rings on the white pegs and the red rings on the red pegs with your left hand (right hand if your are left-handed). Work as quickly as possible as you will only have a few minutes. Your score will be the number of white rings you have on the white pegs added to the number of red rings you have placed on the red pegs, less the number of red rings you have put on the white pegs and the number of white rings on the red pegs.

.....

Sample for Letter Cancellation Task

1. YAIPOIAQWEAMNBHYRIOLPOIUHACXVA

2. WDCABNVGYHTAPOIKLAMNBAUGHJKLAQ

Appendix C

Score Sheet #1

Letter Cancellation Score for Practice Game

Number of possible rows: 34

Number of correct rows: _____

Ring-and-Peg Game Score for Practice Game

Number of white rings on the white pegs _____

Number of red rings on the red pegs _____

Total number correct _____

Number of red rings on the white pegs _____

Number of white rings on the red pegs _____

Total number wrong _____

Final score (subtract number wrong from number correct) _____

.....

Appendix D

Instructions

Combined Game Instructions

This game is to see how well you can do two games at the same time. With your right hand (left hand if you are left-handed) you are to cancel out the capital letters "A" in the rows on the next page, and at the same time you are to place the white rings on the white pegs and the red rings on the red pegs with your left hand (right hand if you are left-handed). You will be scored as explained in the practice game.

Prizes will be given as follows:

- (1) If the class as a whole does better on the ring-and-peg game, then the top one-quarter of the class will each receive \$2.00 and the rest of the class will receive nothing. For example, if there are 40 in your class, and the class as a whole does better on the ring-and-peg game, then the top 10 people will receive \$2.00 each and the other 30 people will receive nothing.
- (2) If the class as a whole does better on the letter cancellation game, then the prize money will be divided equally among the whole class. For example, if there are 40 people in your class and the class as a whole does better on the letter cancellation game then each member in the class will receive 50 cents.

.....

Appendix E

Score Sheet #2

Letter Cancellation Score

Number of possible rows: 60

Number of correct rows: _____

Ring-and-Peg Game Score

Number of white rings on the white pegs _____

Number of red rings on the red pegs _____

Total number correct _____

Number of red rings on the white pegs _____

Number of white rings on the red pegs _____

Total number wrong _____

Final score (subtract number wrong from number correct) _____

.....

Appendix F

Research Questions

1. What do you think this has all been about?
2. Was one game more difficult than the other? Which one?
3. Did you spend more time on one game than on the other? Which one?
4. Did you have any difficulties working in this small booth that you think the experimenter should know about? If so, what?

Appendix G

The Hoffman Socialization Technique Questionnaire

Format

The test was printed so that each situation and the list of items about that situation could be put on one page with the additional instructions at the bottom of each page. For the purposes of this Appendix, each situation will be written and followed by the items to be checked, followed by the additional instructions.

(A)

We are interested in how parents try to get kids to do things for them. For example suppose that you are doing something you enjoy like watching an exciting television program. Your mother comes in and asks you to do something right away. The program has about half an hour to go. You say that you want to see the rest of the program and you'll do what she wants as soon as it's over.

Here is a list of things that some mothers do at times like this. Read each item carefully and check how often your mother does each thing.

Usually	Some- times	Rarely	Never	MOTHER
.....	Hits or slaps you.
.....	Says you should be ashamed of yourself.
.....	Says you can watch the program if you want to but don't come to her later and say you're sorry.
.....	Reminds you of how much she does for you or how hard she works.
.....	Says she'll tell your father.
.....	Turns off the television set.
.....	Says you can watch the program if you do what she wants as soon as it's over.
.....	Goes and does it herself, but you can tell she's hurt or disappointed.
.....	Says she's sorry you'll miss the program and explains the reason why the thing should be done right away.

Appendix G (Continued):

				Gives you an angry look and walks away.
.....
				Says if you don't do what she wants right now, she won't let you watch television later or won't let you do something else you like to do.
.....
				Says she's disappointed in you.
.....
				Does it herself, but seems angry and ignores you for awhile after that.

NOW PLEASE GO BACK AND

Pick the one thing your MOTHER does MOST OFTEN. Put a 1 right next to the checkmark you made for that thing.
Pick the one thing she does SECOND MOST OFTEN. Put a 2 right next to the checkmark you made for that thing.
Pick the one thing she does THIRD MOST OFTEN. Put a 3 right next to the checkmark you made for that thing.

(When you finish, please turn the page and continue.)

(B)

Once in awhile kids are a little careless and break things like a good dish or a lamp, or spill something that stains the rug or couch, or do something like that. When this happens their mothers do or say different things. Think back to the times this has happened to you during the past few years.

Please read each item carefully and check how often your mother does each thing.

Usually	Some- times	Rarely	Never	MOTHER
				Hits or spansks you
.....
				Looks sad and tells you how much she liked the thing you broke or spoiled.
.....
				Calls you clumsy.
.....
				Doesn't say much but you can tell she's sad about what happened.
.....

Appendix G (Continued):

				Says she'll hit or spank you if you ever do that again.
.....
				Asks in an angry voice why you weren't more careful.
.....
				Says she's disappointed in you for being so careless.
.....
				Says can't you do anything right (or something like that).
.....
				Thinks you did it on purpose.
.....
				Asks you to please go away before you do any more damage (or something like that).
.....
				Says not to worry about it because she knows you didn't do it on purpose.
.....
				Doesn't say much, but ignores you for awhile after that.
.....
				Explains the reasons why you should be more careful.

NOW PLEASE GO BACK AND

Pick the one thing your MOTHER does MOST OFTEN. Put a 1 right next to the checkmark you made for that thing.
Pick the one thing she does SECOND MOST OFTEN. Put a 2 right next to the checkmark you made for that thing.
Pick the one thing she does THIRD MOST OFTEN. Put a 3 right next to the checkmark you made for that thing.

(When you finish, please turn the page and continue.)

(C)

Once in awhile kids talk back to their mothers. When this happens mothers will usually say something or do something about it. Different mothers say or do different things. If you talk back to your mother, what does she do?

Please read each item carefully and check how often your mother does each thing.

Appendix G (Continued):

Usually	Some- times	Rarely	Never	MOTHER
				Hits or spansks you.
				Looks sad and says she never expected to hear you talk like that.
				Says she doesn't like children who don't show respect for their parents.
				Says she'll hit or spank you if you ever talk like that again.
				Doesn't say much but you can tell her feelings are hurt.
				Says she won't talk to you or have anything to do with you unless you say you're sorry.
				Makes you stay home or takes away some treat or privilege.
				Says she's hurt or disappointed by what you said.
				Looks angry and walks away without saying a word.
				Says she'll tell your father.
				Listens to what you have to say and asks you to explain why you talked that way.
				Gives you an angry look and ignores you for awhile.
				(After you say you're sorry) she says it's all right she knows you didn't mean what you said.

NOW PLEASE GO BACK AND

Pick the one thing your MOTHER does MOST OFTEN. Put a 1 right next to the checkmark you made for that thing.
Pick the one thing she does SECOND MOST OFTEN. Put a 2 right next to the checkmark you made for that thing.
Pick the one thing she does THIRD MOST OFTEN. Put a 3 right next to the checkmark you made for that thing.

(When you finish, please turn the page and continue.)

Appendix G (Continued):

(D)

There are times when most kids don't do as well as they could in their school work. Think about when this happens to you.

Read each item in the list carefully and check how often your mother does each thing.

Usually	Some- times	Rarely	Never	MOTHER
.....	Says you ought to be ashamed.
.....	Says she knows you can do better and explains the reasons why you should do better in school.
.....	Asks in an angry voice why you did not try harder.
.....	Says that from now on you have to do your homework before you can go out or do anything else.
.....	Reminds you how much it means to them for you to do well.
.....	Asks why you can't do as well as your brother or sister (or someone else).
.....	Doesn't say so but you can tell she's disappointed.
.....	Gives you less spending money or takes away something you like.
.....	Says she's disappointed in you.
.....	Promises you something you want if you do better next time.
.....	She says your <u>father</u> will be disappointed.

NOW PLEASE GO BACK AND

Pick the one thing your MOTHER does MOST OFTEN. Put a 1 right next to the checkmark you made for that thing.
Pick the one thing she does SECOND MOST OFTEN. Put a 2 right next to the checkmark you made for that thing.
Pick the one thing she does THIRD MOST OFTEN. Put a 3 right next to the checkmark you made for that thing.

(When you finish, please turn the page and continue.)

Appendix G (Continued):

(E)

Sometimes kids make fun of another kid making him unhappy or causing him or her to cry. If your mother saw you making fun of another kid what would she say or do?

Here is a list of some things that some mothers do at times like this. Read each item carefully and check how often your mother does each thing.

Usually	Some- times	Rarely	Never	MOTHER
				Hits or spansks you.
				Says you should be ashamed of your- self.
				Looks sad and says she never expec- ted you to say something like that.
				Says she'll hit or spank you if you ever talk like that again.
				Explains that you have made the kid cry and that you should say you are sorry.
				Looks angry and walks away without saying a word.
				Makes you stay home or takes away some treat or privilege.
				Says she's hurt or disappointed by what you said.
				Pulls you away from the child and forces you to go into the house.
				Says that you would feel bad if someone made fun of you and you shouldn't do it again.
				Asks in an angry voice why you were making fun of the other kid.
				Says she'll tell your father.
				(After you say you're sorry) she says it's all raight she knows you won't do it again.

NOW PLEASE GO BACK AND

Pick the one thing your MOTHER does MOST OFTEN. Put a 1

Appendix G (Continued):

right next to the checkmark you made for that thing.
Pick the one thing she does SECOND MOST OFTEN. Put a 2
right next to the checkmark you made for that thing.
Pick the one thing she does THIRD MOST OFTEN. Put a 3
right next to the checkmark you made for that thing.

(When you finish, please turn the page and continue.)

(F)

Please read each item carefully and then check how often your
mother does each thing.

Often	Some- times	Rarely	Never	MOTHER
.....	Praises you.
.....	Criticizes you.
.....	Punishes you.
.....	Smiles at you.
.....	Doesn't let you do things you want to do.
.....	Gives you things you want.
.....	Hugs or kisses you.
.....	Helps you in your school work.
.....	Explains about things that go on in the world.
.....	Gives you good advice about personal things.
.....	Jokes around with you.
.....	Plays indoor games with you (for example, cards, chess, checkers, monopoly, etc.)
.....	Talks with you about your school work.
.....	Calls you by a pet name that you like.
.....	Goes to the movies with you.
.....	Goes to ball games with you.
.....	Takes you on hikes, picnics, fishing trips, or other things like that.

Appendix G (Continued):

				Plays ball or other outdoor games with you.
.....
				Talks with you about things that are fun.

Appendix H

The Kohlberg Test

Self Instructions (also read aloud):

Decision Stories and Questions

On the following pages you will find several stories each of which is followed by some questions. The purpose of these stories and questions is to get at your opinions and ideas. Please write down all the ideas or feelings these stories bring to your mind rather than giving "yes" or "no" answers. Just writing "yes" or "no" is definitely not a good answer. You should always give your reasons for your answer.

You are to write your answers in the spaces provided following each question. If you need more space you may write on the back of the page, but if you do make sure that you mark which question you are answering. You should be able to answer most of the questions in the space that is given.

Remember that this is not a test in the usual sense. There are no right or wrong answers. There can only be different ideas and opinions about these stories. So, do not spend a long time thinking about how to answer any one question, but simply write down what your opinions and ideas are about it.

Format:

The test was printed so that each situation and the questions about that situation could be put on one page with plenty of room for the subjects to write their answers. For the purpose of this Appendix, each situation will be written and followed by a list of the questions asked.

Appendix H (Continued):

In Europe a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost him to make. He paid \$200. for the radium and charged \$2,000. for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about \$1,000. which is half of what it cost. He told the druggist that his wife was dying and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So Heinz got desperate and broke into the man's store to steal the drug for his wife.

Should Heinz have done that? Was it actually wrong or right? Why?

Is it a husband's duty to steal the drug for his wife if he can get it no other way? Would a good husband do it?

Did the druggist have the right to charge that much when there was no law actually setting a limit to the price? Why?

Answer the next question only if you think he should steal the drug.

If the husband does not feel very close or affectionate to his wife, should he still steal the drug? Why?

The drug didn't work, and there was no other treatment known to medicine which could save Heinz's wife, so the doctor knew that she had only about 6 months to live. She was in terrible pain, but she was so weak that a good dose of a pain'killer like ether or morphine would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods, she would ask the doctor to give her enough ether to kill her. She said she couldn't stand the pain and she was going to die in a few months anyway.

Should the doctor do what she asks and give her the drug that will make her die? Why?

Some countries have a law that doctors should put away a suffering person who will die anyway. Should the doctor do it in that case? Why?

The doctor finally decided to kill the woman to put her out of her pain, so he did it without consulting the law. The police found out and the doctor was brought up on a charge of murder even though they knew the woman had asked him. What punishment should the judge give the doctor? Why?

Would it be right or wrong to give the doctor the death sentence?

Appendix H (Continued):

Do you believe that the death sentence should be given in some cases?

While all this was happening, Heinz was in jail for breaking in and trying to steal the medicine. He had been sentenced for 10 years. But after a couple of years, he escaped from the prison and went to live in another part of the country under a new name. He saved money and slowly built up a big factory. He gave his workers the highest wages and used most of his profits to build a hospital for work in curing cancer. Twenty years had passed when a tailor recognized the factory owner as being Heinz, the escaped convict whom the police had been looking for back in his home town.

Should the tailor report Heinz to the police? Would it be right or wrong to keep it quiet? Why?

Is it a citizen's duty to report Heinz? Would a good citizen? Why?

If Heinz was a good friend of the tailor, would that make a difference? Why?

Should Heinz be sent back to jail by the judge? Why?

Joe is a 14-year-old boy who wanted to go to camp very much. His father promised him he could go if he saved up the money for it himself. So Joe worked hard at his paper route and saved up the \$40. it cost to go to camp, and a little more besides. But just before camp was going to start, his father changed his mind. Some of his friends decided to go on a special fishing trip, and Joe's father was short of the money it would cost. So he told Joe to give him the money he had saved from the paper route. Joe didn't want to give up going to camp, so he thought of refusing to give his father the money.

Should Joe refuse to give his father the money? Why?

Does his father have the right to tell Joe to give him the money? Why?

Does giving the money have anything to do with being a good son? Why?

Which is worse, a father breaking a promise to his son or a son breaking a promise to his father? Why?

Appendix H (Continued):

Several years later two grown up brothers had gotten into serious trouble. They were secretly leaving town in a hurry and needed money. Alex, the older one, broke into a store and stole \$500. Joe, the younger one, went to a retired old man who was known to help people in town. Joe told the man that he was very sick and he needed \$500. to pay for the operation. Really he wasn't sick at all, and he had no intention of paying the man back. Although the man didn't know Joe very well, he loaned him the money. So Joe and Alex skipped town, each with \$500.

If you had to say who did worse, would you say Al did worse to break in the store and steal the \$500. or Joe did worse to borrow the \$500. with no intention of paying it back? Why?

Would you feel like a worse person stealing like Al or cheating like Joe? Why?

Who would feel worse, the storeowner who was robbed or the man who was cheated out of the loan? Why?

Which should the law be more harsh or strong against, stealing like Al or cheating like Joe? Why?

Appendix I

Sample for Quick-Word Test

DIRECTIONS: Fill in the answer space for the word that means the same as the first word. If you do not know, GUESS. Work quickly -- ANSWER ALL THE QUESTIONS.

SAMPLE: happy dull seem glad fast
 :::: :::: ~~::::~~ ::::

Appendix J

Kohlberg Scoring

Based on the Global Rating Guide (Kohlberg, multilith, b), each situation was assigned a type, or a dominant type and subtype. A sample summary score sheet is presented below. Each situation is worth three points. If a dominant type-subtype classification is used, the dominant type gets two points and the subtype one point.

Global Rating Summary Sheet

Type: 3
 No.: 139
 Age: 13
 Sex: F

Type	Situations					Σ	%
	III	IV	VIII	I	VII		
1		1				1	7
2							
3	3	2	3	2		10	67
4				1	3	4	27
5							
6							

Appendix K

Hoffman Scoring

Hoffman Test Summary Sheet

Subject's Name: _____

Subject's No.: _____

Group No.: _____

	Situations					Total
	A	B	C	D	E	
Power Assertion	3					3
Love Withdrawal						
Induction Parents	3	3	6	3	1	16
M of F Induction				3		3
Induction Peers					5	5
Affection						19

Appendix L
Table of Means

Religious Training	Fundamentalist Protestant						Roman Catholic						Protestant					
	Sep. School			Non - S.S.			Sep. School			Non - S.S.			Sep. School			Non - S.S.		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Quick-Word Test	66.68	65.15	57.17	56.39	51.96	51.71	53.87	54.38	48.0	49.81	60.67	60.63						
Kohlberg Type I	5.26	4.35	2.25	5.56	3.13	1.29	4.07	4.08	3.93	2.13	2.61	3.75						
Kohlberg Type II	7.79	10.0	6.17	3.39	14.5	10.52	18.13	13.85	15.14	6.38	11.89	10.88						
Kohlberg Type III	32.32	30.95	47.33	30.06	47.21	38.0	41.8	39.54	21.79	32.94	42.89	37.44						
Kohlberg Type IV	50.16	54.05	38.92	67.0	26.17	34.95	32.8	30.85	55.64	53.25	37.78	35.88						
Kohlberg Types V and VI	3.53	0.70	5.5	12.56	7.42	14.38	3.07	11.77	1.93	5.38	4.78	11.56						
Altruism	-1.17	-1.63	-0.02	+0.86	-0.32	+0.55	+0.13	+0.69	+0.01	-0.51	+0.57	+1.41						
Love Withdrawal	5.05	4.75	7.08	7.11	7.54	6.71	7.00	5.31	4.64	5.86	7.56	4.69						
Power Assertion	6.05	5.25	5.83	5.11	3.17	3.86	7.73	3.38	4.57	6.50	3.06	2.88						
Affection	13.42	13.75	12.50	13.06	10.0	12.38	10.8	13.38	13.36	14.13	9.61	15.13						
Induction	13.0	15.35	12.33	13.28	13.0	13.05	9.4	14.92	11.64	13.19	14.67	15.25						
Age	12.4	13.0	13.8	13.9	13.7	13.5	12.7	13.0	13.1	13.1	14.3	13.8						
Number in Group	19	20	12	18	24	21	15	13	14	16	18	16						

Appendix M

Correlation Matrix

N = 206

	Quick-Word Test	Kohlberg Type I	Kohlberg Type II	Kohlberg Type III	Kohlberg Type IV	Kohlberg Types V and VI	Love Withdrawal	Power Assertion	Affection	Induction	Altruism
Quick-Word Test											
Kohlberg Type I	** -.19										
Kohlberg Type II	** -.27										
Kohlberg Type III	.10										
Kohlberg Type IV	.03										
Kohlberg Types V and VI	** .22										
Love Withdrawal	.08	.02	.05	-.08	.01	.01					
Power Assertion	.002	-.003	.00	-.05	.13	-.12					
Affection	.11	-.12	* -.15	-.06	* .17	.03					
Induction	.08	-.06	-.08	.13	-.06	.02					
Altruism	-.04	.09	-.01	.09	** -.18	* .14					

** p < .01

* p < .05

Appendix N

Table 20

Summary Table for Unweighted Means Analysis of Variance

Kohlberg Type I Scores

Source of Variation	SS	df	MS	F
A (Religious Training)	67.08	2	33.54	0.57
B (Separate/Non-Separate School)	6.86	1	6.86	0.12
C (Sex)	0.01	1	0.01	0.00
A X B	64.57	2	32.29	0.55
A X C	39.27	2	19.63	0.33
B X C	111.78	1	111.78	1.89
A X B X C	11.61	2	5.81	0.10
Error	11443.65	194	58.99	

Appendix O

Table 21

Summary Table for Unweighted Means Analysis of Variance

Kohlberg Type II Scores

Source of Variation	SS	df	MS	F
A (Religious Training)	1828.66	2	914.33	6.37*
B (Separate/Non-Separate School)	0.00	1	0.00	0.00
C (Sex)	476.91	1	476.91	3.32
A X B	486.24	2	243.12	1.69
A X C	201.61	2	100.80	0.70
B X C	8.30	1	8.30	0.06
A X B X C	343.19	2	171.59	1.19
Error	27866.76	194	143.64	

* $p < .01$

Appendix P

Table 22

Summary Table for Unweighted Means Analysis of Variance

Hoffman Love Withdrawal Scores

Source of Variation	SS	df	MS	F
A (Religious Training)	31.08	2	15.54	0.85
B (Separate/Non-Separate School)	23.92	1	23.92	1.31
C (Sex)	27.02	1	27.02	1.48
A X B	83.71	2	41.85	2.29
A X C	10.56	2	5.28	0.29
B X C	29.57	1	29.57	1.62
A X B X C	43.40	2	21.70	1.19
Error	3547.25	194	18.28	

Appendix Q

Table 23

Summary Table for Unweighted Means Analysis of Variance

Hoffman Power Assertion Scores

Source of Variation	SS	df	MS	F
A (Religious Training)	62.86	2	31.43	2.28
B (Separate/Non-Separate School)	2.72	1	2.72	0.20
C (Sex)	16.24	1	16.24	1.18
A X B	176.19	2	88.10	6.39*
A X C	61.25	2	30.62	2.22
B X C	68.77	1	68.77	4.99**
A X B X C	54.50	2	27.25	1.98
Error	2674.18	194	13.78	

** $p < .01$ * $p < .05$

Appendix R

Table 24

Summary Table for Unweighted Means Analysis of Variance

Hoffman Induction Scores

Source of Variation	SS	df	MS	F
A (Religious Training)	44.96	2	22.48	0.73
B (Separate/Non-Separate School)	0.53	1	0.53	0.02
C (Sex)	166.37	1	166.37	5.44*
A X B	149.58	2	74.79	2.44
A X C	25.32	2	12.66	0.41
B X C	13.30	1	13.30	0.43
A X B X C	122.49	2	61.25	2.00
Error	5936.96	194	30.60	

* $p < .025$

Appendix S

Table 25

Summary Table for Unweighted Means Analysis of Variance

Hoffman Affection Scores

Source of Variation	SS	df	MS	F
A (Religious Training)	96.60	2	48.30	2.52
B (Separate/Non-Separate School)	9.01	1	9.01	0.47
C (Sex)	202.62	1	202.62	10.57*
A X B	46.35	2	23.18	1.21
A X C	65.42	2	32.71	1.71
B X C	36.89	1	36.89	1.92
A X B X C	56.53	2	28.26	1.47
Error	3719.75	194	19.17	

* $p < .01$

Appendix T

Table 26

Data for Newman-Keuls Comparisons between Weighted Means of the
Kohlberg Type III Scores and Religious Training

(1) Treatment Means Ranked in Order and Number of Replications

	Prot. Sep.Sch.	Fund. Sep.Sch.	Fund. Non-S.S.	Prot. Non-S.S.	R.C. Non-S.S.	R.C. Sep.Sch.
Mean	27.37	31.64	38.70	40.17	40.67	42.60
Number	30	39	30	34	28	45

(2) Significant Studentized Ranges for 5% Newman-Keuls Test

2	3	4	5	6
2.77	3.31	3.63	3.86	4.03

(3) Appropriate Significant Range Factors

2	3	4	5	6
48.17	57.76	63.13	67.13	70.08

Appendix U

Table 27

Data for Newman-Keuls Comparisons between Weighted Means of the
Kohlberg Type IV Scores and Religious Training

(1) Treatment Means Ranked in Order and Number of Replications

	R.C. Sep.Sch.	R.C. Non-S.S.	Prot. Non-S.S.	Fund. Sep.Sch.	Fund. Non-S.S.	Prot. Sep.Sch.
Mean	30.96	31.83	36.83	52.11	52.96	54.45
Number	45	28	34	39	30	30

(2) Significant Studentized Ranges for 5% Newman-Keuls Test

2	3	4	5	6
2.77	3.31	3.63	3.86	4.03

(3) Appropriate Significant Range Factors

2	3	4	5	6
55.37	66.17	72.56	77.16	80.56

Appendix V

Table 28

Data for Newman-Keuls Comparisons between Means of the Kohlberg Type V and Type VI Scores and Religious Training

(1) Treatment Means Ranked in Order and Number of Replications

	F.S.S. Female	P.S.S. Male	R.C.N. S.S.Male	F.S.S. Male	P.N.S.S. Male	P.S.S. Female	F.N.S.S. Male	R.C.S.S. Male	P.N.S.S. Female	R.C.N.S. S.Female	F.N.S.S. Female	R.C.S.S. Female
\bar{X}	0.7	1.93	3.07	3.53	4.78	5.38	5.50	7.42	11.56	11.77	12.56	14.38
n	20	14	15	19	18	16	12	24	16	13	18	21

(2) Significant Studentized Ranges for 5% Newman-Keuls Test

2	3	4	5	6	7	8	9	10	11	12
2.77	3.31	3.63	3.86	4.03	4.17	4.29	4.39	4.47	4.55	4.62

(3) Appropriate Significant Range Factors

2	3	4	5	6	7	8	9	10	11	12
35.84	42.83	46.97	49.95	52.15	53.96	55.51	56.81	57.84	58.88	59.78

Appendix W

Table 29

Data for Newman-Keuls Comparisons between Means of the
Altruism Scores and the Kohlberg Dominant Types

(1) Treatment Means Ranked in Order and Number of Replications

	Kohlberg Type IV	Kohlberg Type III	Kohlberg Types I,II	Kohlberg Types V,VI
Mean	-0.92	0.03	0.31	0.99
Number	23	17	8	7

(2) Significant Studentized Ranges for 5% Newman-Keuls Test

2	3	4
2.85	3.42	3.77

(3) Appropriate Significant Range Factors

2	3	4
5.07	6.09	6.71

Appendix X

Table 30

Data for Newman-Keuls Comparisons between Weighted Means of the
Altruism Scores and Religious Training

(1) Treatment Means Ranked in Order and Number of Replications

	Fund. Sep.Sch.	Prot. Sep.Sch.	R.C. Sep.Sch.	R.C. Non-S.S.	Fund. Non-S.S.	Prot. Non-S.S.
Mean	-1.40	-0.25	0.12	0.41	0.42	0.99
Number	39	30	45	28	30	34

(2) Significant Studentized Ranges for 5% Newman-Keuls Test

2	3	4	5	6
2.77	3.31	3.63	3.86	4.03

(3) Appropriate Significant Range Factors

2	3	4	5	6
4.63	5.53	6.06	6.45	6.73

Appendix Y

Table 31

Data for Newman-Keuls Comparisons between Weighted Means of the Kohlberg Type II Scores and Religious Training

(1) Treatment Means Ranked in Order and Number of Replications

	Fund. Non-S.S.	Fund. Sep.Sch.	Prot. Sep.Sch.	Prot. Non-S.S.	R.C. Sep.Sch.	R.C. Non-S.S.
Mean	4.78	8.90	10.76	11.39	12.51	15.99
Number	30	39	30	34	45	28

(2) Significant Studentized Ranges for 5% Newman-Keuls Test

2	3	4	5	6
2.77	3.31	3.63	3.86	4.03

(3) Appropriate Significant Range Factors

2	3	4	5	6
33.18	39.65	43.49	46.24	48.28

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